BANCA NAZIONALE DEL LAVORO

QUARTERLY REVIEW

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ERRATA-CORRIGE

« Quarterly Review » - No. 53 - June 1960

Please, sobstitute column 2 in table on page 206 with the following:

	Net worth (*million lire*)
Edison	268,800
FIAT	245,900
Montecatini	169,600
STET	164,000
Edisonvolta	149,200
SIP	144,200
SME	129,500
SADE	101,000
Finsider	81,900
Terni	73,600
ILVA	70,400
SNIA-Viscosa	64,800
Vizzola	55,000
Pirelli S.p.A.	54,500
Cornigliano	54,300
Bastogi	53,200
La Centrale	52,500
Finelettrica	50,200
Selt-Valdarno	49,600
Romana El.	49,300
SESO	47,000
CIELI	40,400
Italgas	36,700
Unes	34,600
TETI	32,800

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The Postwar Business Cycle in Western Europe and the Role of Government Policy [1]

The post-war period in Europe has been remarkably free from the serious fluctuations in employment and activity which were recurrently experienced in pre-war years. The main economic problems have been predominantly those associated with high or excess demand — rising prices and balance of payments difficulties. The purpose of this article is to examine the factors which have modified the operation of the business cycle in the post-war period, to analyse the extent to which the experience of high levels of demand and employment has been due to accidental and temporary circumstances, to permanent changes in the structure and behaviour of the economy, or to improvements in economic policy. In analysing the reasons why serious recession has been avoided, one must inevitably give some consideration to the nature of postwar inflation, but this is not our major concern in this article. Nor are we primarily concerned with the reasons why postwar economic growth has been fast.

A comparison of Europe and the U.S. can help to illuminate this problem because the United States has had a greater post-war experience of recession than European countries, and there has been a considerable American literature which has attempted to assess the importance of changes in economic behaviour and government policy since prewar. Many of the " accidental " factors which have operated in Europe were not present in the United States or exhausted their effect much earlier. Several of the structural or institutional changes in the American economy have not taken

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(1) This article was made possible by the award to the author of a NATO research fellowship.

place in Europe, and the role of government in the economy is also different.

In the first section of this paper an attempt is made to characterise the postwar record in statistical terms and to set it in historical perspective. The next two sections describe factors which have contributed to high levels of European demand, and attempt to distinguish between the temporary and more permanent changes. There are four sections on the changed role of government, and a section of conclusions.

I. A Quantitative Summary of Postwar Experience

In terms of total output, unemployment and industrial production it is clear that the postwar record has been markedly better than historical experience. It has also been much more impressive than that of the U.S. The aggregate G.N.P. of Western Europe has risen continuously and its growth averaged 4.9% a year from 1948 to 1959. Even in the " recession " years 1952 and 1958, the increase was about 2%. The European aggregate gives perhaps too favourable an impression of the average cyclical experience, as its movement is heavily influenced by a few rapidly growing countries, and there have been minor differences in the timing of the cycle in different countries. However, there are many countries where G.N.P. has never fallen in the postwar period, and even in the countries where falls in output have occurred, the declines were almost all less than 1 per cent. This is in sharp contrast to the inter-war period when G.N.P. was below previous peaks in most countries for about a third or more of the time. The inter-war years were, of course, particularly bad, but even in the 1901-1913 period, output was below previous peaks for 5 years out of 13 in the United Kingdom, 4 years in Italy, 2 years in Denmark and Norway, and 1 year in the Netherlands. The U.S. postwar record is much less favourable than that of Europe with a slight fall in G.N.P. in 1949, and a fall of about 2 per cent in 1954 and again in 1958. In terms of movements from peak to trough, the postwar U.S. recessions have involved falls in G.N.P. of 2, 4, and 4½ per cent. For most European countries, comparison is not possible on a peak

TRENDS AND CYCLES IN G.N.P. TABLE 1

	Percentage Average Annual Growth			Number of Years Below Previous Peak			Least Favourable Annual Percentage Change from Previous Peak		
	1901-13	1925-38	1948-59	1901-13	1925-38	1948-59	1901-13	1925-38	1948-59
Austria	n. a.	n. a.	7.6	n. a.	n. a.	0	n. a.	n. a.	+ 0.5
Belgium	n. a.	n. a.	3.0	n. a.	n. a.	1	n. a.	n. a.	- 0.8
Denmark	3.4	2.6	3.0	2	4	3	- 2.3	- 6.0	- 0.9
France	n. a.	n. a.	5.2	n. a.	n. a.	0	n. a.	n. a.	+ 2.1
Germany	1.9	2.8	9.3	0	9	0	+ 1.6	-24.8	+ 2.8
Italy	2.2	1.8	5.7	4	7	0	- 5.2	- 5.4	+ 2.9
Netherlands	2.6	1.3	4.8	1	7	0	0	-12.1	+ 1.7
Norway	2.6	3.4	3.6	2	3	0	- 0.9	- 8.0	+ 0.3
Sweden	n. a.	3.0	3.6	n. a.	4	1	n. a.	-14.0	- 0.5
United Kingdom	1.5	2.5	2.5	5	2	1	- 2.9	- 0.5	- 0.5
O.E.E.C. Countries	n. a.	n. a.	4.9	n. a.	n. a.	0	n. a.	n. a.	+ 1.7
United States	3.4	1.0	3.4	2	8	3	- 8.2	-29.0	- 2.0
Canada	n. a.	0.8 (1)	4.3	n. a.	10	2	n. a.	-28.3	- 3.6

Sources: A. MADDISON, "Economic Growth in Western Europe 1870-1913", *Banca Nazionale del Lavoro Quarterly Review*, March 1959; *O.E.E.C. General Statistical Bulletin*, May 1960; *O.E.E.C. 11th Annual Economic Review*, p. 116; *Output Labour and Capital in the Canadian Economy*; W.C. Hood and A. Scott, Ottawa, 1957.

(1) 1926-38.

TABLE 2

TRENDS AND CLCLES IN UNEMPLOYMENT AS A PERCENTAGE OF THE LABOUR FORCE

Country	Average Annual Level			Biggest Annual Increase		
	1904-13	1925-38	1950-59	1904-13	1925-38	1950-59
Denmark	5.0	10.5	4.8	2.0	7.1	1.4
Germany	1.7	8.8	4.5	0.8	5.6	0.0
Netherlands	2.1 (1)	10.0	1.6	n. a.	5.8	1.0
Norway	1.6	11.4	1.0	0.6	5.5	0.6
Sweden	2.5 (1)	6.9	1.3	n. a.	2.8	0.5
United Kingdom	3.5	10.7	1.6	3.1	4.2	0.8

Source: A. MADDISON, *Op. cit.*, p. 34.

(1) 1911-1913.

to trough basis because of the absence of quarterly or seasonally adjusted data but in the U.K. the fall from the 1957 peak to the

1958 trough was 1.3 per cent, *i.e.* less than a third of that in the United States.

Another dramatic improvement since prewar has been the reduction in the level of unemployment and in its fluctuations. In most European countries, except Belgium, Denmark and Italy, the level of unemployment now usually lies between 1 and 2 per

TABLE 3

TRENDS AND CYCLES IN INDUSTRIAL PRODUCTION

	Percentage Average Annual Growth			Number of Years Below Previous Peak			Least Favourable Annual Percentage Change from Previous Peak		
	1901-13	1925-38	1948-59	1901-13	1925-38	1948-59	1901-13	1925-38	1948-59
Austria	n. a.	1.2	10.1	n. a.	8	0	n. a.	-34.3	+ 1.0
Belgium	3.3	1.5	2.9	2	8	3	- 3.6	-27.1	- 6.5
Denmark	n. a.	3.2	4.6	n. a.	5	2	n. a.	-12.8	- 4.0
France	4.3	0.2	6.4	0	10	1	0	-25.6	- 1.0
Germany	4.7	4.0	12.6	1	8	0	- 3.8	-40.8	+ 3.4
Italy	5.2	2.0	8.9	2	9	0	- 3.8	-22.7	+ 2.2
Luxembourg	7.3	fall	3.3	2	9	4	-10.8	-32.0	- 8.3
Netherlands	n. a.	3.7 (1)	6.2	n. a.	6 (1)	0	n. a.	-16.9(1)	0
Norway	4.4	2.8	5.7	1	6	1	- 2.9	-20.3	- 3.1
Sweden	n. a.	5.8	3.1	n. a.	3	2	n. a.	-12.1	- 2.0
United Kingdom	2.6	2.9	3.6	2	8	2	- 7.1	-14.5	- 3.1
O.E.E.C. Countries	3.8	2.7	6.9	1	8	0	- 1.8	-23.3	0
United States	5.4	fall	3.3	3	9	3	-15.7	-45.2	- 7.7

Sources: For prewar years *Industrial Statistics, 1900-1957*, O.E.E.C.; for postwar years *O.E.E.C. General Statistical Bulletins*.

(1) Between 1926-38.

cent of the labour force, although it is only in the past year or so that it has fallen so low in Germany. The increase in Dutch unemployment from 1 to 2 per cent of the labour force in 1958 was perhaps the biggest increase in any European country in the recession of that year. In the interwar period by contrast, the average level of unemployment was about 10 per cent of the labour force and the range of fluctuation was very wide. Year to year changes of 4 per cent were quite common. Here again, U.S. experience in the postwar period has been less favourable than

European. Year to year fluctuations have been about twice as large as in Europe, and the average level of unemployment has also been about twice as large (2).

Aggregate European industrial production grew by 6.9 per cent a year from 1948 to 1959, and it has never fallen on a year to year basis. This is in strong contrast with the interwar period when it was below prewar peaks for over half the years in most countries. In the case of industrial production, it is possible to compare quarterly movements in different countries on a seasonally adjusted basis. These figures make possible a crude estimate of business cycle peaks and troughs. There was a mild and short dip in output in a few European countries in the course of the first postwar U.S. recession in 1948-49, but the downward movements were not big or widespread enough to call this a general European recession. The biggest postwar recession in Europe occurred in 1951-52, somewhat earlier than the second postwar U.S. recession. The 1951-52 recession affected all European countries. In Belgium-Luxembourg and the U.K. its intensity was similar to that in the U.S. in 1953-54, and in many cases the European recession was more prolonged than in the U.S. The 1958 recession affected all European countries, but it was generally much milder than that of 1952 both in amplitude and duration. In no country, except Belgium-Luxembourg, was the recession nearly as deep as in the U.S., and only in the U.K. was it more prolonged. In Table 5 we have attempted to compare the degree of postwar cyclical experience in different countries. It is clear that Germany and Italy have been virtually free of recession, and that their expansions have been both big and prolonged. All other countries, except Belgium, have had recessions with an amplitude only half as big as the average for the U.S., and the average duration of recessions

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(2) The relative degree of unemployment in the U.S. would be exaggerated by a comparison of our figures with the American official statistics which show an average of 5 per cent of the civilian labour force unemployed from 1950 to 1959. The American figures are derived from sample surveys of the labour force rather than from unemployment insurance statistics as in most European countries. If U.S. figures were available on the same basis as those for Europe, they would probably show an average of something like 3 per cent unemployment for the period 1950-59. The British census gives a figure for U.K. unemployment which is derived by a similar process to that used in U.S. sample surveys. The April 1951 U.K. census showed 516 thousand unemployed compared with a figure of 281 thousand insured unemployed in the same month.

AMPLITUDE AND DURATION OF CYCLICAL MOVEMENTS
Amplitude measured by percentage change in seasonally adjusted

	Recession				Expansion (1)	
	Peak	Trough	Amplitude	Duration	Amplitude	Duration
Austria	no recession				+ 73.8	12
Belgium	I 49	IV 49	- 7.2	3	+ 15.9	6
Denmark	no recession				+ 24.4	10
France	II 49	III 49	- 1.5	1	+ 24.7	10
Germany	no recession				+ 108.5	11
Italy	IV 48	I 49	- 1.1	1	+ 41.3	9
Netherlands	IV 48	I 49	- 1.2	1	+ 26.2	8
Norway	II 49	III 49	- 1.6	1	+ 26.2	8
Sweden	no recession				+ 15.0	12
United Kingdom	no recession				+ 20.1	12
O.E.E.C. Countries	no recession				+ 31.9	14
United States	III 48	IV 49	- 7.3	5	+ 35.0	15

Sources: *O.E.E.C. General Statistical Bulletins* and *Federal Reserve Bulletin*, December 1959, pp. 1473-1474.

(1) The amplitude of expansion is measured from peak to peak, the duration is, of course, measured from trough to peak.

TABLE 4

IN INDUSTRIAL PRODUCTION SINCE THIRD QUARTER OF 1948
quarterly index of production. Duration measured in quarters.

Recession				Expansion (1)		Recession			
Peak	Trough	Amplitude	Duration	Amplitude	Duration	Peak	Trough	Amplitude	Duration
III 51	I 53	- 5.0	6	+ 51.5	20	I 58	IV 58	- 2.0	3
II 51	III 52	- 8.3	5	+ 16.9	19	II 57	II 58	- 10.3	4
I 51	III 52	- 6.8	6	+ 18.4	19	II 57	IV 57	- 3.3	2
I 52	I 53	- 5.0	4	+ 53.5	20	I 58	I 59	- 2.6	4
II 51	III 51	- 1.2	1	+ 75.4	26	I 58	II 58	- 0.7	1
II 51	IV 51	- 4.0	2	+ 53.8	25	I 58	II 58	- 1.4	1
I 51	IV 51	- 6.7	3	+ 36.8	21	I 57	IV 57	- 4.7	3
III 51	III 52	- 4.1	4	+ 34.2	19	II 57	I 58	- 5.4	3
III 51	III 52	- 6.0	4	+ 17.5	19	II 57	III 58	- 3.3	5
III 51	III 52	- 7.8	4	+ 15.8	13	IV 55	III 58	- 1.7	11 (2)
I 52	II 52	- 2.1	1	+ 41.1	23	I 58	II 58	- 0.7	1
III 53	II 54	- 8.6	3	+ 9.7	10	IV 56	II 58	- 12.1	6

(2) Within this period there was a slight rise in production from IV 56 to III 57 which was followed by another fall. It could therefore be considered as two recessions instead of one.

TABLE 5

AVERAGE AMPLITUDE AND DURATION OF POSTWAR BUSINESS CYCLES
Amplitude measured by percentage change in seasonally adjusted quarterly index of production. Duration measured in quarters.

	Average of Postwar Recessions		Average of Postwar Expansions	
	Amplitude	Duration	Amplitude	Duration
Austria	-3.5	4.5	+62.7	16.0
Belgium	-8.6	3.0	+16.4	12.5
Denmark	-5.1	4.0	+21.4	14.5
France	-3.0	3.0	+39.1	15.0
Germany	-1.0	1.0	+92.0	18.5
Italy	-2.2	1.3	+47.6	17.0
Netherlands	-4.2	2.3	+31.5	14.5
Norway	-3.7	2.7	+30.2	13.5
Sweden	-4.7	4.5	+16.3	15.5
United Kingdom	-4.8	7.5	+18.0	12.5
O.E.E.C. Countries	-1.4	1.0	+36.5	18.5
United States	-9.3	4.7	+22.4	12.5

Source: Derived from Table 4.

has been smaller than in the U.S. except in the U.K. The amplitude and duration of expansions has also been more favourable in Europe than in the U.S., except in Belgium, Sweden, and the U.K.

II. The Development of Demand in the Postwar Period

(a) *The Period of Recovery and Rearmament.*

In the early postwar years overall demand was extremely high. Consumption in nearly all European countries was well below prewar levels. Stocks of consumer durables and semidurables (such as textiles) had been run down. There was a great shortage of capital equipment and inventories, as most countries were employing a much higher proportion of the labour force than before the war and capital formation during the war and pre-war depression had been low. There was also a heavy demand for housing because of war damage, lack of wartime construction, population movement, and the maintenance of low rents through controls and subsidies.

During and immediately after the war, many governments undertook a considerable redistribution of income which transferred purchasing power to those with low incomes or heavier family responsibilities. There were also substantial payments to demobilised soldiers. This was particularly true in the United Kingdom, Scandinavia, the Netherlands and France. In several countries, governments tried to keep prices down by subsidies and price controls, and these measures also contributed to demand pressure.

In some countries, special factors were operative which prolonged the post-war recovery period. In Germany, recovery was not really allowed to start on any substantial scale until the currency reform of 1948, and the recovery problem was bigger than that of most countries because of extensive war damage, the division of the economy and the influx of refugees. In the United Kingdom there were also special burdens, in the shape of foreign claims on resources resulting from the wartime accumulation of debt, sale of pre-war foreign assets, and a particularly severe deterioration of the terms of trade. The U.K. also undertook a large government programme for health which made sizeable claims on resources.

In the United States, the effect of backlogs and income transfers had been exhausted by 1948 when total output was already 64% above 1938 as compared with 1% below in Europe. U.S. consumption began to flag and personal savings rose from zero to something like the prewar relation to disposable income. There was a fall in inventories and fixed investment which created the 1948 recession. In most European countries, however, the postwar backlogs had not been fully met when the Korean war added another extraordinary wave of demand.

The impact of the Korean rearmament drive of 1950-52 was smaller in Europe than in the U.S., but it had a substantial effect on the economies of France and the United Kingdom. Other countries increased defence spending to a much smaller extent, but their economies were stimulated by the increase in U.S., U.K. and French imports and by the world-wide inventory boom set off by the rise in raw material prices. While the rearmament drive lasted, other demand pressures were partly held back by fiscal and monetary policy as well as by direct controls. Hence, it was not until about 1953 or 1954 that the backlogs of consumer demand disappeared in Europe. Consumption per head regained prewar levels in Europe as a whole in 1951, in Germany in 1953, and in the U.K. in 1954.

Significantly enough, it was at this stage that personal savings began to revive in the latter two countries.

The movement of Europe's external balance from a deficit of $7 billion in 1947 to a $1.5 billion surplus in 1953 also had a powerful impact on demand. American aid allowed most countries to consume more than they produced for a number of years, but as it was terminated a good deal of the increase in output had to be devoted to exports. Austria, Germany and the Netherlands got the biggest stimulus from trade — having moved from deficits amounting to 8%, 4% and 10% of G.N.P. respectively in 1948 to surpluses representing 3%, 4% and 6% of G.N.P. in 1953.

It is, perhaps, useful to compare the recovery period following the second world war with the years following the first world war. The first world war was followed by a boom in prices and output, but within three years there was a sharp recession in most countries which reduced European industrial output by over 10% in 1921 and caused unemployment to rise substantially. There was a recovery in 1922 but during the 1920s unemployment generally remained much higher than before the war. There were, of course, fewer autonomous factors to keep demand high at that time. The backlogs of demand were smaller because the war had been shorter, affected fewer countries and involved less physical damage. The war had been preceded by a fairly steady period of progress which compared favourably with the depressed decade of the 1930s, so that the capital stock was more adequate for postwar levels of output. Finally, there was no rearmament stimulus such as was provided by the Korean war.

However, economic policy was also quite different forty years ago. Governments at that time allowed inflation to develop rapidly so that there was a speculative inventory boom and a sharp increase in prices which reduced the purchasing power of accumulated wartime savings, and in some countries destroyed it completely. The boom was followed by a very tight monetary policy. There was no large-scale redistribution of income, and in several countries governments followed a policy of wage cuts during the 1921 recession. There was little co-operation in rebuilding the world economy. The U.S. helped to force European governments into deflationary policies in 1921 by reducing its capital outflow. Within Europe itself, the main international economic discussion was about German reparations. By contrast, monetary policy was

generally easy in the period following the second world war; purchasing power was maintained longer in the U.K. and Scandinavia by suppressing demand through direct controls, and even in countries where there were currency reforms as in Germany, Belgium and the Netherlands, purchasing power was better preserved than in some of the disastrous inflations of the early 1920s. There was a massive outflow of U.S. aid to finance the European deficit, and the liberalisation of European trade and the credit provided by E.P.U. were major factors which enabled governments in payments difficulties to avoid or mitigate deflationary policies in the period following 1948.

(b) *The 1952 Recession.*

Although the backlog elements in demand had not been completely eliminated, there was a mild recession in Europe in 1952. This recession was not caused by a fall in defence production as was the post-Korean recession of 1953-54 in the U.S. In fact, it occurred whilst defence spending was still rising. It was due partly to a collapse of the inventory boom which had accompanied the Korean outbreak, but it was also due to a large extent to anti-inflationary policies of governments, particularly in the U.K. and France, and to the international repercussions of these policies. In the U.K., there was a strain on resources as production was switched from civilian to military purposes in conditions of very full employment. The authorities used fiscal measures to restrain private demand and severely restricted hire purchase and credit facilities. The situation in France was similar. Both France and the U.K. ran into considerable balance of payments difficulties which they met by imposing quantitative import controls. These import restrictions had an adverse effect on the exports of other European countries, and temporarily slowed down the general pace of European growth. The collapse of raw material prices also reduced the purchasing power of primary producers and led to a fall in European exports to these countries.

(c) *The Return to Normality.*

From 1953 to 1957 Europe enjoyed its first postwar period of "normal" expansion. Nearly all of the backlogs were gone, or

were rapidly disappearing, defence expenditure was falling in most countries, and total government claims on resources grew slowly except in France where they were the major inflationary force in the economy. Europe as a whole did not have to squeeze domestic consumption in order to eliminate a payments gap as had been the case in the recovery period. At the beginning of this expansion, the main stimulus came from government measures to encourage consumption and housebuilding. This was done by reducing taxes and increasing financial aid for housing, ending the monetary restraint introduced in the Korean boom, and removing nearly all the remaining direct controls, *e.g.* abolition of rationing, building licensing, and hire purchase controls in the United Kingdom. Some of the housing growth of this period had elements of backlog because governments had restrained building in the recovery period — it is, however, doubtful whether demand would have been nearly so great if governments had not continued to stimulate it by rent controls and subsidies. Consumption also increased sharply in this period, particularly consumer durables. There was an element of backlog in demand for consumer durables, particularly in the U.K., but since demand for durables is very elastic at European income levels, the sharp increase in personal incomes and consumer credit in this period would, in any case, have led to a substantial increase in expenditure on such items.

The most striking economic development since the recovery period was the investment boom of 1954-57. Investment was already high when it started and was carried to unprecedented levels in practically all European countries (3). It was induced by high consumption demand and shortage of production capacity in the same way as many investment booms in the past, but it owed its persistence and intensity partly to elements of backlog, partly to a changed attitude to investment, and partly to government policies.

Not only was demand increasing sharply, but its pattern was also changing. The output of passenger cars rose from 1.5 million in 1953 to 3.5 million in 1958, production of many household durables rose faster and the new goods involved heavy investment requirements. The more competitive state of consumer

(3) It is noteworthy that there has been no comparable postwar investment boom in the U.S. (i.e. in the sense that the U.S. rate of investment has been no higher than the long-term historical average).

markets also made it necessary to improve the quality of many goods by replacing obsolete equipment. The liberalisation of European trade sharpened competition and provided new market possibilities for the most dynamic firms. It did, of course, discourage investment by firms which lost markets to foreign competitors, but if policy had been more protectionist these firms would probably have invested less than their more dynamic neighbours.

In earlier post-war years, certain kinds of investment had been deliberately restricted as a matter of government policy, whereas the period from 1953 was free of controls. There had also been a rather intensive use of the existing capital stock in the early post-war years in many countries because of the high levels of employment compared with pre-war years, so that there was a need to provide the additional employees with more adequate facilities, particularly factory and office space. This shortage was due not only to the war but to the depressed level of investment in the 1930s. It was reflected not only in the need for more capital but in the need to replace capital whose scrapping or demolition had been postponed.

A general stimulus to modernisation investment in the post-war period has been provided by the continuance of high levels of employment and the expectation by entrepreneurs that markets are likely to continue to grow and that labour costs are likely to continue steadily upwards. Apart from the need to substitute capital for labour, this also led to a feeling that labour had to be attracted by better working conditions — hence the interest in providing more and better factory and office space. The expectation of rising prices was another incentive to put liquid or borrowed funds into new plant and equipment. Apart from these cost considerations, the successes of the recovery period and the mildness of the 1952 recession probably gave entrepreneurs optimistic expectations about the long-term growth of markets. For these reasons, the high level of investment was not only induced by the concrete profit possibilities of the immediate demand situation, but was partly a result of the generally expansionist view of the long-term cost and profit prospect.

There were a number of special government stimuli to investment which help to explain the intensity of the investment boom. In the earlier part of the boom, governments had promoted housing investment, but this was generally curtailed after 1955, except in France and Italy. There were also other more general investment

stimuli. In the United Kingdom, the excess profits tax imposed in 1951 was repealed in 1953 and "initial" allowances permitting more rapid depreciation were restored. Investment was stimulated by the introduction of investment allowances (depreciation allowances bigger than the cost of assets) in the 1954 budget. In Germany tax free status was given in 1952 to investment in certain bottleneck industries — steel, coal and electricity — under the Investitionshilfegesetz, and from 1953 accelerated depreciation was allowed in all industries. Similar fiscal encouragements to investment were introduced in other countries at about the same time. In Italy and the Netherlands accelerated depreciation was allowed, in France the switch from a production to a value added tax favoured investment and in Sweden the investment tax was abolished.

During 1955 and 1956 the pressure of demand on resources grew to be excessive in several countries, with a consequent increase in prices and serious balance of payments deficits in the United Kingdom, France and the Netherlands. The price rise received a new impetus at the end of 1956 from the Suez crisis which also exacerbated the payments problems of France and the United Kingdom. The payments problems were further complicated in 1957 by speculation on a realignment of European currency parities. For these reasons, most governments adopted restrictive policies from 1955 to 1957. In nearly all countries more emphasis was placed on monetary than on fiscal policy, but it was supplemented in several countries by a number of selective restraints. Restraints on housebuilding were imposed at an early stage in Belgium, Germany, the Netherlands, Norway, Sweden and the United Kingdom, and these proved very effective. Hire purchase controls were imposed in five countries, indirect taxes were raised, and subsidies lowered in an effort to check consumption. Private investment was checked by a temporary investment tax in Norway and Sweden, and changes in depreciation allowances in Belgium, the Netherlands and the United Kingdom also had some effect. At a later stage in the boom public investment was restrained in Belgium and the Netherlands in 1957, and the U.K. restrained both public works and nationalised industry investment in 1956 and 1957. The selective restraints applied to housing and consumer durables were most effective, as were the special Scandinavian taxes on investment. However, monetary policy was slow to take effect in checking the boom in

private non-residential fixed investment and stocks except in Germany. On the external side the most difficult problem was speculative capital movement and leads and lags in payments. In the U.K. and the Netherlands (and at an earlier stage, Denmark), the payments problems of the period were met almost entirely by internal measures of adjustment. France was the only country which adopted quantitative restrictions or changed its exchange rate to meet the payments problem. In Germany, there were unilateral tariff reductions in 1956 and 1957 in an attempt to reduce the foreign surplus, and monetary policy was also eased for this reason.

(d) *The 1958 Recession.*

In most countries restrictive measures began to show their cumulative effect on investment at the beginning of 1958. Fixed investment began to level off in most countries and towards the end of the year there was a general decline in inventories. There was also a fall in the level of trade as activity slackened, and the fall in exports was an important deflationary factor in some countries. Thus, although the 1958 recession had certain features which made it resemble an old-fashioned business cycle, it was, in fact, mainly induced by government anti-inflationary policies which had been fairly prolonged because they were intended not only to curb excess demand but to check wage increases and deal with speculative payments crises.

In the recovery from the 1958 recession, policy also played a predominant role. Monetary policy was eased after mid-1958. Housebuilding was stimulated in most countries by the reduction in interest rates, measures to increase the availability of credit and larger subsidies. Public works and nationalised industry spending were increased in Austria, France, Italy, Norway, Sweden and the U.K. As a result, the fall in private investment in manufacturing was more than compensated in most countries, and in Germany and Sweden, government stimulants succeeded in raising private investment as well. In the United Kingdom, consumption rose sharply after the removal of hire purchase restraints in autumn 1958 and the reduction of purchase tax and income tax, and the increase of transfer payments in 1959. Apart from these government stimuli, recovery was aided by a general increase in stocks and in exports.

(c) *Conclusions.*

It is clear that in the period up to 1952-53 the main forces maintaining demand were of an extraordinary nature — backlogs of demand, and military spending — although governments contributed something further by income redistribution and easy money policies and by avoiding the deflationary and beggar-your-neighbour policies which were prevalent after the first world war. The recession of 1952-53 was primarily due to a reversal of the Korean inventory boom and to government policies to restrain the inflation and balance of payments difficulties created by the Korean war. After 1953, the backlogs disappeared and military spending grew little or fell. In spite of this, demand remained at very high levels, and the 1958 recession was milder than that of 1952. Unemployment in 1958 was not much more than 2% of the labour force in nearly all industrial countries, including Germany which in the early postwar period had a level nearly three or four times as high. The expansion of demand in 1953-55 owed a good deal to government policy stimuli, and the " recession " of 1958 which was felt generally in Europe and the longer stagnation from 1955 to 1958 in the U.K. were again attributable very largely to government policies to check inflation and balance of payments difficulties. It is clear, therefore, that the European economy no longer operates as it did in prewar years.

III. Permanent Changes in Economic Behaviour

It is sometimes suggested that the post-war economy has acquired new characteristics which have brought demand to a permanently higher level or which have made it less volatile. It seems worth examining the major factors which are usually cited in support of this suggestion, before analysing the role of government.

A major reason for the buoyancy of demand is that a couple of decades of very activity levels have generated forces which tend to make such conditions self-perpetuating. Perhaps the most important change since prewar is that the " normal " situation is one of labour scarcity. Thus employers are unable to cut wage rates when demand falls off, whereas in prewar years they were able

to enforce cuts in money income which greatly added to the downward spiral of recession. Government policy has also contributed to change the attitude of employers, for the authorities no longer give a lead in cutting wages in recessions as they used to. In fact, wage rates may even rise during recessions and help sustain demand. In many industries, employers are loth to dismiss workers or even to cut hours when demand declines for fear that they might lose personnel who would be difficult to recruit again later. This tendency has, of course, been strengthened by the growth in the relative importance of white-collar workers whose jobs are more secure.

Although the strength of the labour market has helped to sustain demand, the pressure of wage claims in periods of expansion has also been an important factor in the process of inflation in the past few years. It is not, of course, clear that pressure from wages is an independent cause of inflation, and it was obviously not the major cause in the early postwar years when demand was clearly excessive, and import prices were rising sharply. However, strong wage or cost pressures have become a characteristic of the economy at high but not necessarily excessive levels of demand in many European countries and the U.S. It is difficult to measure the impact of wage pressures empirically, particularly as the abolition of price and rent controls and subsidies inherited from the period when governments tried to suppress excess demand has caused a lagged increase in wages in many countries in times when demand was no longer excessive. There are also considerable differences between different European countries. In the United Kingdom and Scandinavia, trade unions are powerful and wage pressures have been particularly strong, although they have been sensitive in some degree to the state of demand. In Germany, strong wage pressures have only arisen in the past year or so since unemployment fell to levels comparable with other countries, but there is little evidence that they have acquired the independent momentum which seems characteristic of some other countries, for wage claims abated in the production lull of 1958, and rose again only when the 1959/1960 expansion was well under way. It is also difficult to discern wage pressure as an independent element in the French economy, where the government has been the major source of demand pressure and is usually itself the key factor in setting the pace for wage increases. It is clear that strong wage pressures

have become a fairly permanent feature of the postwar economy of many, if not all, countries, and the practice of cutting wage rates in recessions has disappeared practically everywhere. In the past few years, governments have been increasingly concerned with the inflationary consequences of wage pressures, but few of them have made much progress in developing policies specifically designed to moderate wage increases. It may well be that future developments in this field will lead to a weakening of the postwar pressure for higher wages, but it is unlikely that governments will revert to the wage-cutting tactics of the inter-war years, or that they will allow recessions to develop to the stage where employers are able to cut wage rates. In fact, if governments were successful in moderating inflationary wage demands, they could afford to give active encouragement to wage claims when activity began to slacken. Greater success in tackling the wages problem directly would also be an improvement on the present situation in which governments attempt rather unsuccessfully to exert indirect pressure on wages by checking demand to the point of inducing a fall in output.

It has been suggested that the experience of full employment and the explicit commitment of governments to this policy has led businessmen to make long-term investment plans and keep a steadfast nerve in time of recession. In the bigger European countries total fixed investment has stagnated rather than fallen in the two postwar recessions, but this aggregate stability usually concealed a fall in private non-residential investment offset by a rise in housing. Government policy also played a substantial stabilising role. In the Benelux countries, fluctuations in investment have been bigger, with a 10% fall in the Netherlands in 1951-52, and larger falls in Belgium and Luxembourg, and there were substantial movements in these countries in the 1958 recession. It seems therefore that businessmen are quite capable of postponing long-term investment plans when the business outlook becomes uncertain, and there is no clear evidence that private investment has acquired any greater stability than that imparted by government policy. However, the long experience of rapidly growing markets, shortage of labour and steadily rising labour costs has contributed substantially to raise the general level of investment, and the level at which the economy operates is such that business has buoyant expectations. Thus, it was very difficult for the authorities to break the investment boom

by restrictive measures in 1955-57, and in 1959 business investment was quite responsive to official stimuli. At the same time, the greater relative importance of investment means that fluctuations in investment can have a bigger impact on the economy.

As far as inventory investment is concerned, movements in demand have become, perhaps, more volatile than they used to be, although it may be simply that inventory fluctuations are more apparent now because they usually mirror the primary impact of recession, and bigger movements in other demand components are now checked before they go very far. It is difficult to be sure of this for very few countries have good figures on inventories, even for post-war years. It is clear that inventories have played a bigger role in each post-war American recession than in 1929-30, when inventories increased in the initial stages, but the 1937-38 recession was heavily affected by inventory movements, and the milder 1924 and 1927 fluctuations were inventory recessions. In Europe, inventory movements appear to have been less volatile than in the United States, although the lack of quarterly figures for Europe makes judgment difficult. It may be that American inventory movements are bigger and more rapid because businessmen are better informed about the general state of the conjuncture. Hence, we may even expect inventory fluctuations to increase as business indicators improve and businessmen become more sophisticated.

Consumption is not a volatile element of demand and has risen fairly steadily with the rise in incomes. There have been some fluctuations in European demand for consumer durables but these have been largely induced by government policy and the general trend has been one of rapid and uninterrupted growth. By contrast, U.S. demand for durables is growing less rapidly because the existing stock is much higher, but variations in demand for durables as in the boom of 1955 and the sharp fall in 1956 have been an important source of instability for the economy as a whole. It is likely that similar autonomous fluctuations will occur in Europe as incomes approach closer to American levels, and as the growth of consumer credit increases the possibilities for spending beyond current income. Durables were 8.3% of European consumption in 1957 as compared with 11.2% in the U.S., so that they are already an important factor in demand.

All European countries have a sufficient dependence on foreign trade to be seriously affected by inflationary or deffationary shocks

from abroad (see Table 6). In the postwar period, most countries have received inflationary impulses from abroad at one time or another. In Germany, the large trade surplus has provided a constant stimulus to domestic activity for many years. In 1952 and in 1958,

TABLE 6

PERCENTAGE CHANGE IN EXPORTS AT CURRENT PRICES RELATIVE TO G.N.P. (1)

	Ratio of Exports to G.N.P. in 1958	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
		Ratio of Change in Exports to G.N.P.									
Austria	25.3	4.0	8.5	5.4	2.2	4.5	4.4	2.1	5.1	3.7	−0.2
Belgium	34.1	1.1	2.3	11.8	−2.5	− 1.3	1.5	5.3	5.0	1.3	−0.9
Denmark	34.1	5.3	6.2	7.6	0.7	1.1	2.1	3.2	2.5	2.7	1.4
France	13.9	n. a.	2.9	4.0	0.3	0.1	2.3	1.0	−0.6	1.2	2.1
Germany	24.9	n. a.	n. a.	6.3	2.8	2.2	3.5	3.2	3.7	4.0	1.1
Greece	14.0(2)	0.4	1.9	0.7	1.2	5.0	3.6	3.1	0.9	2.1	n. a.
Iceland	28.8(2)	(−6.3)	(9.0)	(13.6)	(2.6)	9.0	4.4	1.1	3.4	−2.7	n. a.
Ireland	35.4	(0.7)	(2.5)	(4.1)	(4.8)	(2.1)	−0.2	0.2	−0.6	4.1	−0.4
Italy	15.2	0.9	1.9	3.1	−1.0	1.9	1.0	1.4	1.9	2.9	0.5
Luxembourg	89.2(2)	n. a.	−1.2	47.9	9.7	−28.2	−0.1	14.9	15.1	4.1	n. a.
Netherlands	49.7	8.7	10.9	12.4	4.5	1.1	4.4	5.6	3.6	5.0	0.4
Norway	42.5	1.7	9.1	16.0	0.1	− 3.7	2.8	5.2	8.0	3.7	−4.5
Portugal	18.8	n. a.	n. a.	n. a.	−1.5	− 0.9	2.4	1.9	1.8	0.1	0.3
Sweden	27.6	1.1	5.6	12.4	−2.2	− 1.3	1.8	2.3	3.4	3.5	−1.0
Switzerland	26.0	(−1.1)	(2.0)	(4.6)	(0.4)	(2.5)	0.4	1.8	2.1	1.9	0.0
Turkey	2.6	1.6	0.4	1.5	1.1	0.4	−1.1	0.4	0.7	0.0	(−0.8)
U.K.	21.7	2.3	4.7	4.0	0.3	− 0.8	1.6	1.6	2.1	1.0	−0.7
Canada	19.2	−0.2	0.9	4.3	2.0	− 0.7	−1.0	2.3	2.0	0.1	−0.3
U.S.	5.2	−0.4	−0.7	1.5	−0.2	− 0.3	0.2	0.5	0.9	0.7	−0.8

Source: *O.E.E.C. General Statistical Bulletin*, January 1960.

(1) *e.g.* The figures for 1958 show the change in exports of goods and services at current prices between 1957 and 1958 divided by 1958 G.N.P. at 1958 prices.

(2) 1957.

there were deflationary consequences for several countries as a result of the general recession and fall in the volume of trade; in both cases, Belgium, Luxembourg and Sweden suffered as exporters of industrial raw materials for which demand and prices fluctuated heavily, and Norway was hit as an exporter of shipping services. Most European countries have not, however, suffered seriously from

external deflationary forces, and most payments problems have been created by domestic inflation, although there have been important speculative capital movements which have particularly hit the U.K. The relative absence of deflationary trade impulses has been due to the widespread adoption of full employment policies, but it has also been due to an abandonment of beggar-your-neighbour remedies for meeting payments difficulties. Policy weapons such as quotas, exchange controls and even exchange rate adjustments are now rarely used to deal with such problems. These developments have been fostered by the growth of international institutions, particularly the O.E.E.C., I.M.F. and the G.A.T.T., which provide many safeguards non-existent in the 1930s and which we will analyse in greater detail later. It seems then that the economies of Europe are as vulnerable as ever to unfavourable external stimuli, and suffer less from them only because of a general improvement in domestic economic policy and in standards of international economic behaviour.

In the United States, there have been institutional changes which have strengthened the resistance of the economy and the financial structure to recession or which have, at least, provided bulwarks against a far-reaching deflationary spiral on the 1929 scale. The banking system has been guaranteed against collapse by the institution of Federal Deposit Insurance. The mortgage market has been completely changed by the disappearance of the non-amortising mortgage, the establishment by the government of a secondary mortgage market (F.N.M.A.), the creation of government insured Federal Housing Association mortgages and guarantees for Veterans Administration mortgages. The possibility of stock market speculation has been limited by the supervisory activities of the Securities and Exchange Commission and the restraints on margin trading which can be imposed by the Federal Reserve Authorities. Although these institutional changes have no European counterpart, it should be remembered that European financial institutions were generally less unstable than American in the prewar period (in spite of the bank failures in Germany and Austria) and, therefore, not so much in need of reform. These measures were, after all, meant to prevent collapse and not to promote normal ranges of stability.

Hence, it does seem true that European economies have acquired some characteristics which tend to promote high levels of activity and which are not due to government policy. However, these forces have themselves been generated by a sustained experience of high levels of demand and will not necessarily be permanent. As far as stability is concerned, the private sector of the economy does not really seem to have changed much, though governments have moderated the amplitude of fluctuations, and their character has changed because of the higher general level of activity. The difficult cyclical problems have been inflation and payments disequilibrium rather than unemployment, for downward movements are easier to check in an economy which retains the momentum of full employment than in one which is stagnating or depressed. The lesser volatility of European demand for inventories and consumer durables tends to make the European economy more stable than the American, as it has been in the past. But this European advantage may well disappear in future.

IV. The Role of Government

A major reason for the changed behaviour of the postwar European economy is that governments have acquired a much better appreciation of what they should do in business cycles and also have better information on what is happening to the economy. Generally, they now do the right thing instead of the wrong thing, and they are also better equipped to do the right thing. Government financial operations are so conducted that they correct recessionary or inflationary tendencies to an important degree intsead of exaggerating them as they did in prewar years.

It is often taken for granted that the relative size of government operations has greatly increased since prewar years. However, government expenditure on goods and services has declined since prewar for Europe as a whole, although there has certainly been an increase in transfer payments and in the control of investment. In nearly all European countries, public consumption is smaller than in the U.S. but transfer expenditures are much higher. European governments have much greater control over investment than the U.S. and do much more of the economy's saving.

(a) *The Scale of Government Operations.*

For Europe as a whole, the share of government in total expenditure on goods and services is lower than it was in 1938, *i.e.* 14% instead of 16%. This drop is largely due to the substantial decline in Germany and Italy where prewar military expenditures were much higher than they are now. However, there are also some other countries where there has been a slight fall in the share of

TABLE 7

GOVERNMENT CURRENT EXPENDITURE (1) AS A PERCENTAGE OF G.N.P. 1938 AND 1958

	Expenditure on Goods and Services		Subsidies, Transfers and Debt Interest	Total Current Expenditure
	1938	1958	1958	1958
O.E.E.C. Countries combined	15.8	14.2	n. a.	n. a.
Austria	16.5 (2)	13.9	14.7	28.6
Belgium	n. a.	11.1	13.6	24.7
Denmark	9.3	13.0 (3)	8.3 (3)	21.3 (3)
France	13.0	14.5	14.8	29.3
Germany	23.1	13.5	17.0	30.6
Greece	14.8	13.4 (4)	5.2 (4)	18.6 (4)
Ireland	12.8	12.7	10.6	23.3
Italy	16.3	12.2	13.7	25.9
Netherlands	11.4	14.4	14.1	28.5
Norway	9.9	13.2	11.5	24.7
Portugal	11.4	11.3	3.8	15.1
Sweden	10.4 (5)	18.2	10.6	28.7
United Kingdom	13.5	16.6	12.5	29.1
United States	11.4	18.8	8.0	26.8

Source: *Statistics of Sources and Uses of Finance 1948-58*, O.E.E.C., 1960.

(1) These percentages refer to total government expenditure. A substantial proportion is not in the hands of the central authorities who have primary responsibility for anti-cyclical policies, but in the hands of local governments, whose spending or revenue collection it is often difficult for the central government to direct in an anti-cyclical way. The share of central government in total government expenditure was as follows: Austria 57%, Belgium 65%, France 87%, Germany 44%, Italy 85%, Netherlands 70%, Sweden 66%, U.K. 79%, U.S. 68%, Norway 68%.

(2) 1937.

(3) 1956.

(4) 1957.

(5) 1938-39.

public consumption. In the U.K., France, Netherlands and Scandinavia, the proportion has risen, but in no European country except Sweden has the relative growth of public consumption since prewar been as big as in the U.S.

The growth in the relative scale of government operations has not always, in itself, contributed to economic stability, even though government spending is not subject to instability for the reasons that motivate private investment. The biggest increase in government spending has been for military purposes, and such expenditure can generate its own fluctuations in the economy, either because of variations in the degree of international tension or because of changes in technology which suddenly require large amounts of equipment to be scrapped, *e.g.* the switch from aircraft to missiles, or which may make strategic stockpiles redundant at a time when private demand is flagging.

European governments have increased their transfer payments substantially since before the war, and in Austria, Belgium, France, Germany and Italy transfer payments are actually bigger than expenditure on goods and services. In all European countries, except Greece and Portugal, transfer payments are a much bigger proportion of total government expenditure and of G.N.P. than in the U.S.

In European countries the volume of housebuilding is virtually dictated by government policy as the majority of houses are built with some kind of government financial support. The methods of providing this finance vary considerably from country to country. In the U.K. financial support is largely confined to publicly-owned dwellings. Public ownership is also important in Austria, Iceland, Italy and the Netherlands, but in these and other European countries governments give financial support of some kind (which can be varied for anti-cyclical reasons) to houses built for private ownership either by granting loans at low interest rates, or by giving interest subsidies. Several governments also give important tax remissions to housebuilders and these are most substantial in Germany where savings devoted to housebuilding have been virtually freed from tax liability. In most countries, government support for housebuilding is probably greater than in prewar years, although considerable public housing schemes then existed and cheap money policies gave housing a powerful boost in the U.K. in the 1930s. In the U.S., too, government control over housing is greater than prewar. The Government provides insurance for F.H.A. mortgages and guarantees

V.A. mortgages as well as providing a secondary mortgage market. These facilities can be varied considerably for anti-cyclical reasons, and government mortgages dropped from 51% of the total in 1955 to 30% in 1957. In practice, the U.S. government's power to influence housebuilding for anti-cyclical purposes is not inferior to that of most European countries.

TABLE 8

GOVERNMENT FINANCE FOR HOUSING

	Percentage of Housing Expenditure financed from Public Funds	% New Dwellings in receipt of public financial assistance	Year
Austria	n. a.	60–70	1955
Belgium	44	53	1956
Denmark	55	85	1955
France	46	91	1957
Germany	28	52 (1)	1957
Greece	5	27	1956 (2)
Iceland	75	97	1957
Italy	13	21	1955
Netherlands	64	95	1957
Norway	47	66	1956 (3)
Portugal	3	2	1955
Spain	55	66	1956 (2)
Sweden	49	97	1956
Switzerland	1	7	1955
Turkey	2	25–33	1955
United Kingdom	56	58	1957 (2)

Source: E.C.E., *Financing of Housing in Europe*, Geneva, 1958.

(1) Excludes dwellings built with tax concessions only, which are considerable, and cover 90-95% of total construction.

(2) First column refers to 1955.

(3) First column refers to 1957.

A big difference between the scope of government activity in the U.S. and Europe is that European countries have more publicly and municipally owned enterprises, and a substantial nationalised industry. In Austria, France and the U.K., a good deal of nationalisation has been carried out since the war, but in other countries the scope of government enterprise has not changed since prewar. In France and the U.K., public enterprises absorb about

a fifth of total fixed capital formation. In other European countries the proportion is smaller, but in almost all cases there is public ownership of electricity, gas, water, railways, airlines, city transport, radio and television broadcasting, telephones and telegraph all of which are privately owned in the U.S. (4).

The proportion of total saving which is done by European governments is much higher than in the U.S. In the period 1952-58 the government current surplus amounted to more than a third of total saving in Austria, and to a quarter or more in Germany, Sweden, Portugal and Luxembourg. Only in Belgium, where the government ran a deficit, and in Greece was the share of government in savings lower than in the U.S. These government savings are used to finance capital expenditure on public works, housing and in nationalised industries (although nationalised industries also provide some of their own finance), and in Germany they have also served to finance the accumulation of foreign exchange reserves. The fact that European governments do more saving than the U.S. reflects their greater financial responsibility for housing and for nationalised industry. It is also perhaps due to the greater inflationary

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(4) In France, postwar nationalisation included electricity, gas, coal, atomic energy, the Renault motor works, and 3 big banks — Crédit Lyonnais, Société Générale, and the B.N.C.I. The Government also owns the railways, airlines, some shipping lines, radio, telegraph, telephone, city transport, the tobacco industry and parts of the insurance, aircraft and petroleum industries. In the U.K. postwar acquisitions include some steel companies, electricity, coal, gas, atomic energy, railways and airlines. The Government also owns radio, telephone and telegraph. In Germany the Government owns railways, some mines, the Volkswagen motor works and telephones. Gas, electricity and city transport are under municipal ownership. In Italy a considerable portion of industry is controlled by the Government via a system of holding companies. The biggest of these is the I.R.I. which controls a good deal of engineering, steel, transport and public utility enterprises and the other large government holding company is the E.N.I. which controls the petroleum, atomic energy and chemical industries. Some enterprises are under mixed ownership. In Scandinavia, there has been no nationalisation since prewar, and the nationalised sector is smaller than in the United Kingdom or France. Nevertheless, the public sector is fairly large in Sweden and Norway. In Sweden the Government industries are railways, tobacco, wines and spirits, S.A.S., and a large iron ore mining company. The gas and electricity industries are owned by municipalities. In Norway the Government controls sales of wines and spirits, 51 per cent of hydro-electric investment, and owns the railways. Gas and electricity are under municipal ownership as in Sweden. In Denmark the Government owns the railways and municipalities own gas and electricity. In the Netherlands public enterprises consist of airlines, railways, coal mines, gas, water and electricity. In Belgium the public sector is smaller than in the Netherlands. In Austria nearly all industry is owned directly or indirectly by the government because the nationalised sector is substantial and the *Kreditanstalt* and *Länderbank* are government institutions which own a good deal of the equity capital of private industry.

state of the European economies and their weaker capital markets which make it more difficult to raise funds by borrowing. In fact, the government share in saving has fallen in recent years as private

TABLE 9

THE SHARE OF GOVERNMENT IN TOTAL FIXED INVESTMENT IN 1957

	Public Works	Housing in Finance of which Govt. participates	Public Enterprises and Nationalised Industries	Total Investment under Government control
France	10.5	22.4	23.0	55.9
Italy	8.4	6.0	9.6	24.0
Sweden	16.7	23.5	17.8	58.0
United Kingdom	8.3	9.8	26.1	44.2

Sources: U.K., *National Income Blue Book*; Sweden, *Konjunkturläget*, Hösten, 1958, Konjunkturinstitutet; Italy, *Relazione Generale sulla Situazione del Paese*, 1958, pp. 42 and 46; France, *Statistiques et Etudes Financières*, April 1959, p. 391, Ministère des Finances. Rough estimates for some other countries are available in the *Economic Survey of Europe in 1959*, E.C.E., Geneva, 1960, Chapter V, p. 3.

TABLE 10

RATIO OF GOVERNMENT SAVING TO TOTAL SAVING 1952-58 (1)

Austria	35.2	Italy	18.0 (6)
Belgium	−3.2	Netherlands	21.1
Denmark	21.7 (3)	Norway	25.3 (4)
France	17.2 (4)	Portugal	27.6
Germany	28.5	Sweden	24.5
Greece	9.5 (2)	United Kingdom	15.6
Ireland	14.6 (5)		
Luxembourg	26.1 (2)	United States	12.2 (2)

Sources: *Statistics of Sources and Uses of Finance 1948-1958*, *O.E.E.C.*, February 1960; and *O.E.E.C. General Statistical Bulletin*, January 1960.

(1) Arithmetic average of the savings ratio for each of the years 1952-58.
(2) 1952-57.
(3) 1952-56.
(4) 1954-58.
(5) 1954-57.
(6) 1955-58.

savings have revived. Most European governments provide some capital for private industry either to close "gaps" in the capital market, to aid in structural re-adaptation to new market conditions,

or simply to give preferential treatment for weak industries such as agriculture. Such aid to private industry is no more widespread in Europe than it is in the U.S. and does not represent any basic difference in philosophy. In fact, in most European countries such aid may be smaller than in the years of depression in the 1930s. However, in France, Norway, and Sweden, the government exercises fairly substantial control over the allocation of private savings either by acting as a financial intermediary or by directing banks and insurance companies as to the allocation of their savings. In other countries, there is much less of such control, although there have been some restraints in the U.K. through the Capital Issues Committee.

(b) *Built-In Stability.*

Economic stability can be fostered to an important extent if the tax system has an automatic tendency to compensate cyclical movements in income. It has been estimated (5) that in the 1953-54 U.S. recession the potential decline in G.N.P. was offset by about 30 to 40 per cent because of the automatic compensatory variation in revenues and transfer expenditures. In the 1930s, by contrast, American government operations could actually aggravate recessionary influences by 10 to 20 per cent. In Europe, the automatic compensatory impact of the tax system has also grown since prewar, but to a lesser extent than in the U.S.

A major compensatory item in U.S. recessions is the rise in transfer payments which offsets about a fifth of the decline in income. These payments had a compensatory effect in the 1930s as well, but they are now much more important than they were then. In Europe, social transfers have increased markedly since prewar and are much more important than in the United States, particularly those which provide a *fixed* income which does not vary in recessions or booms, *e.g.* pensions and family allowances. The main transfer which is *compensatory* in the sense of varying inversely with earned income is unemployment benefit. Here again,

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(5) Cf. David Lusher, "The Stabilising Effectiveness of Budget Flexibility", a chapter in *Policies to Combat Depression*, N.B.E.R., Princeton, 1956. Cf. also *National Income and Outlay*, National Income Supplement to *Survey of Current Business*, U.S. Dept. of Commerce, 1959. Unfortunately, such sophisticated studies are not available for European countries.

most European schemes are more generous than American, because they have a wider coverage, benefits last longer and are bigger in relation to normal income although U.K. benefits are only a third of normal income, *i.e.* about the same as in the U.S. Farm subsidies are important in both Europe and the U.S. and help to compensate for declines in farm income, although in some cases they are erratic in their effect. However, falls in farm income do not always coincide with moderate industrial recessions, when demand for food remains steady.

In recent years, there has tended to be some reversal of the earlier post-war redistribution of incomes as taxes have been lowered and subsidies and rent controls have diminished. However, Germany and Sweden have recently made a substantial increase in transfer payments by the introduction of generous pension schemes, and they may be followed by other countries. The long-run effects of income redistribution seem to have been negligible as a factor in maintaining demand at high levels, for the propensity to save in most countries is now as high as it ever was. There has been a tendency in each of the post-war United States recessions for savings to vary contra-cyclically, perhaps because of greater equality as well as because consumers are now used to steadily rising incomes and have confidence in the eventual renewal of expansion. But in the U.K. and Germany the increase in personal savings tended to aggravate the 1958 recession. Hence, it does not seem that greater equality has given greater stability to consumption.

In the United States, tax revenue has become much more sensitive to cyclical movements because of the enormous growth in Federal income and corporate taxes. Corporate profits — the most volatile source of income in a recession — are taxed much more heavily than in prewar years and form a bigger proportion of total revenue. As a result, the fall in corporate profits taxes in recession now tends to offset the total fall in incomes by a fifth (6). Personal

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(6) A major factor stabilising incomes in U.S. recessions which is not due to the government budget is the maintenance of dividends by corporations in the face of declines in profits. The fall in total profits therefore leads to a sharp fall in the undistributed portion. This is a stabiliser which also existed in pre-war years. In Europe, data on profits are not very good but there is reason to expect that business would react in a similar manner. For most of the post-war period the margin of retained profits has probably been bigger than in prewar years so that there is a bigger potential cushion. In 1938 in the U.K. 58.9 per cent of corporate profits were distributed in dividends, 29.2 per cent retained

income tax is a less important compensatory factor and the fall in tax collections usually offsets only a twelfth or less of the decline in total income. In the U.S. direct taxes rose from 29% of total government receipts in 1937 to over half in 1957. Only in Norway and Sweden is direct taxation as important for the budget or for

TABLE 11

CATEGORIES OF GOVERNMENT REVENUE AS A SHARE OF G.N.P. 1957

Country	Total Current Revenue	Social Security Levies	Direct Taxes	Indirect Taxes	Income from Property and Entrepreneurship and current transfers from rest of world
Austria	35.1	6.8	12.0	13.8	2.5
Belgium	23.1	6.0	7.0	9.2	0.9
Denmark (1)	25.8	1.3	11.5	11.4	1.6
France	32.7	9.3	5.7	17.1	0.6
Germany	36.9	9.4	9.5	14.7	3.3
Greece	19.7	3.7	3.4	11.7	0.9
Ireland	25.3	1.0	4.9	16.8	2.6
Italy	29.3	8.5	5.8	13.8	1.2
Luxembourg	33.3	8.0	12.8	9.4	3.1
Netherlands	32.6	7.5	12.9	10.0	2.2
Norway	31.3	2.4	14.6	13.5	0.8
Portugal	18.4	3.6	5.4	8.4	1.0
Sweden	31.7	2.8	17.4	9.4	2.1
United Kingdom	31.0	3.0	11.8	13.5	2.7
United States	27.7	3.3	13.7	8.8	1.9
Canada	27.1	1.9	9.9	12.6	2.7

Source: *Statistics of Sources and Uses of Finance 1948-1958*, O.E.E.C., 1960.
(1) 1956.

the economy as in the U.S. In most European countries direct taxes probably form a smaller share of total government receipts than in prewar years, both because of the increase in social security levies and, in some cases, of indirect taxes. In the U.K. for

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and 11.9 per cent paid in taxes. In the years 1953-57 on average 28.1 per cent were distributed, 43.8 per cent were retained and 28.1 per cent were paid in taxes. In 1952 when there was a sharp fall in corporate profits, dividends rose. Cf. *National Income and Expenditure*, 1958, Table 3.

instance, direct taxes fell from 42% of receipts in 1938 to 38% in 1957 (7). It is only in Scandinavia, the Netherlands and Luxembourg that direct taxes are higher than indirect taxes, and in other European countries indirect taxes are more important.

One of the consequences of the large European transfer payments is that social security contributions are much bigger than in the U.S., particularly in Germany, France and Belgium, where they provide more than a quarter of total government revenues. In Scandinavia and the U.K., however, such payments are less important than in the U.S. In many cases these payments are in the nature of a poll tax, do not vary in time to compensate the general cycle in incomes, nor do they vary with the level of individual income (8).

Another important change in the character of tax revenues since pre-war has been the timing of their collection. In the U.S. the bulk of taxes on personal or corporate income is now paid at or near the time that income accrues, under the pay-as-you-go and quarterly corporation withholding (self-assessment) tax systems. Taxes go down almost immediately there is a recession and vice versa in a boom, and there are also provisions for carrying over losses, whereas in pre-war years, payment in arrears often accentuated the cycle. European countries have also made substantial progress but less than the U.S. Most governments collect income tax currently from wage or salary earners, but not from other taxpayers or from companies which have the most volatile incomes. These delays are not particularly significant if tax reserves are accumulated at the time when income arises as is the case in the U.K. where companies provide the Treasury with advance revenue by buying Treasury Deposit Receipts. However, when companies are not very liquid, heavy tax obligations may well accentuate recessions, and booms may be encouraged if tax claims are low.

Thus government budgetary operations tend automatically to compensate for fluctuations in the private sector of the economy to some degree in many European countries, but there are few cases where government operations have as big an automatic stabilising

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(7) It should be noted, however, that the purchase taxes in the U.K. tend to be compensatory in that demand for durables is highly elastic, although it does not always fall in mild recessions.

(8) In the U.S. the introduction of social security contributions in 1937 helped to cause a recession because the immediate obligations were not offset by benefits.

effect as in the U.S. A good many of the large social transfers in European countries are fixed rather than compensatory, and they are usually financed by fixed charges which are also insensitive to income fluctuations. A lower proportion of European tax receipts is sensitive to income fluctuations, and more European taxes are collected in arrears.

(c) *Active Government Anti-Recession Policies* (9).

There is no doubt that most European governments now accept much greater responsability for economic stabilisation than they did before the war. These commitments have been embodied in employment acts in the United Kingdom and Sweden, in the Monnet Plan in France, and in the Economic and Social Council and Central Plan Bureau in the Netherlands. Even in countries where the commitment to active economic policies is less overt, and where the main authorities responsible for economic stabilisation are still the Central banks, as in Belgium or Germany, there is by no means a policy of *laisser faire*. It is true, of course, that government policy in both Germany and Italy is much less interventionist than that of the prewar totalitarian regimes, and it is also true that even before the war, there was a sophisticated and relatively successful full employment policy in Sweden.

Most governments have to make public their view of the general economic situation in a rather formal way at least once a year in connection with the budget. In Norway, Sweden and the Netherlands, the fiscal budget is accompanied by a "national budget" which is a detailed forecast of the development of supply and demand in the coming year and an outline of proposed government policy. In France, there is something similar in the Comptes de la Nation, and there are also two "rapports de conjoncture" every year to the Conseil Economique et Sociale. In the United Kingdom, the annual economic survey is more modest. It contains a review of the recent situation and a brief outline of the economic outlook.

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(9) A more detailed account of the development of economic policy instruments in European countries is contained in *Nationale Konjunkturpolitik in Europa 1954-56*, C.E.P.E.S., Frankfurt, 1958, and in the annual reviews and country reviews published by the O.E.E.C., particularly *O.E.E.C. 9th Annual Report*, Chapters I, II and V, Paris, April 1958, *O.E.E.C. 10th Annual Review*, Chapters II and III, Paris, March 1959, and *O.E.E.C. 11th Annual Review*, Chapter II, Paris, April 1960.

Similar annual surveys exist in Italy and Denmark as well as in the U.S. In Germany and Belgium, there are no such surveys, but the German central bank keeps up a constant stream of analysis in its periodic report. In all countries, these reports are discussed in Parliament, but in France they are also subject to a more general public discussion by economic experts, employers and workers in the Conseil Economique et Social. France is therefore the only European country which has a counterpart to the Joint Congressional Committee in the United States.

Most governments now explicitly recognise the function of the budget as a stabilisation instrument. However, there are only a few cases, notably Austria and Sweden, where the budget accounting procedure has been redesigned to show clearly the impact of government operations on economic activity. Powers to change taxes between budgets vary from country to country, but are nowhere very great, and it is only in very exceptional circumstances that the timing of budgets can be changed to meet new economic conditions. Apart from these technical problems, there are, in practice, limits to the amount of government freedom to vary budgets, and the almost exclusive wartime and early postwar reliance on, or claims for, fiscal policy have somewhat abated in recent years.

It has not proved too easy to vary government expenditure as a counter-cyclical weapon. Current outlays on necessary public services or social transfers are not usually the most desirable items to cut in times of inflation, and it would often be wasteful to expand them temporarily during recessions. Public capital expenditure can, in theory, be accelerated or retarded to compensate for deflationary or inflationary situations, but here again, it is not always desirable and there are often difficulties in making the necessary administrative arrangements quickly enough. It has therefore been increasingly recognised that budgetary policy should be designed to have a selective impact on particular kinds of private demand which are deficient or excessive, and there has been a smaller emphasis on the significance of the overall budget surplus or deficit. In this respect it seems that European attitudes have been more sophisticated than those in the U.S.

There have been some innovations in types of tax which are used for anti-cyclical purposes at the discretion of governments. These are peculiar to European countries and have not been used

INSTRUMENTS OF MONETARY POLICY US

	Austria	Belgium	Denmark	France
Bank Rate	—	—	—	—
Open Market Operations				
Reserve Ratios	—	—		—
Obligation to hold government securities		—		—
Rediscount Ceilings		—		—
Gentlemen's Agreements	—		—	—
Stock Market Margins				
Consumer Credit Controls			—	—
Other Selective Credit Restraints		—		—
Exchange Control	—	—	—	—
Devaluation	—	—	—	—

(1) Control exercised under a gentleman's agreement.

TABLE 12

USED IN THE POSTWAR PERIOD

Germany	Italy	Netherlands	Norway	Sweden	Switzerland	U.K.	U.S.
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—		—	—	—		—	
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			—	— (1)		—	
—		—	—	—	—	—	
—	—	—	—	—		—	
—	—	—	—	—		—	

(1) Includes Switzerland.

in the U.S. Several countries have attempted to influence business investment by varying the rate of depreciation allowance, or by imposing taxes or giving subsidies on investment. The degree of tax discrimination between distributed and undistributed profits has been varied as an indirect means of affecting investment. These measures have had a considerable impact but their effect was sometimes delayed so that it did not always have a compensatory influence at the right time. Changes in purchase taxes have been made for anti-cyclical purposes in the U.K. and these have had a very marked contra-cyclical influence because of the high rates of tax and the high elasticity of demand for the products. Several European governments have given special incentives to saving by the issue of tax free bonds similar to those issued by U.S. State governments.

Monetary policy is not very effective against severe recession and it fell out of favour in the 1930s. The relative quiescence of monetary policy continued well into the postwar period in spite of the prevalence of inflation and balance of payments difficulties. There were several reasons for this, apart from a general preference for budgetary policy or direct controls. The existence of large public debts would have made dear money expensive, and many of the inflationary problems were so severe in the early postwar years that direct controls were more effective than monetary policy. The return to normal conditions in the early fifties made it possible for monetary policy to be used more effectively as the liquidity of business was reduced and dependence on the banking system increased. It was recognised that monetary policy can be more flexible than fiscal policy and may be a useful expansionary weapon when the economy is suffering from mild recession as well as an anti-inflationary instrument. The greater convertibility of currencies also revived its role in influencing short-term money movements. In prewar years, the main impact of monetary policy was thought to be concentrated on business investment in inventories; more recently, monetary policy has been aimed at fixed investment or consumers' durables. The effectiveness of monetary policy has been biggest as an anti-cyclical weapon in Germany where the range of measures used has been large, and where business relies heavily on the banks for finance and has usually been less liquid than in other countries.

The range of policy weapons used under the general head of monetary policy varies considerably from country to country, but

is usually much wider in Europe than in the U.S. The traditional bank rate weapon has been used very frequently in nearly all European countries since 1954. Open market operations are a major weapon of monetary control in the U.K. and Germany, but in other European countries this weapon has not been used because the market in government bonds is not large or well organised. There has however, been considerable use of changes in reserve ratios. Most countries have also used a number of more selective weapons. This is particularly true of Belgium, France and Germany, but it is also true of the U.K. which has traditionally relied on more general weapons. These selective measures have included the obligation on commercial banks to hold government securities, the imposition of re-discount ceilings on the commercial banks with penalty rates for excess discounting, and gentlemen's agreements with the commercial banks to restrain particular kinds of credit. There have been some formal kinds of restraint on bank advances to certain kinds of borrowers, but no exact parallel to the Federal Reserve practice of prescribing stock market margin requirements. In most countries the problem of credit control is more complex than before the war because of the growth of financial institutions other than banks. As a result, there has been some extension in the scope of monetary policy. Control of consumer credit has become a major anti-cyclical weapon in the U.K. and has been used elsewhere. In Norway and Sweden official guidance has been extended to the investment policies of insurance companies.

(d) *The Impact of Policy on Different Categories of Demand.*

Investment. One of the most volatile elements of demand is investment, and control over investment adds powerfully to the stabilising potential of government. Governments can provide a good deal of stability in the economy simply by arranging their own capital spending in a relatively smooth flow. When government-controlled investment is such a large portion of the total, it is better to aim at this than to vary public spending counter-cyclically, even though the more flexible of public investment projects will have to be kept in mind as priorities for cuts or expansion if the situation requires. A good deal of nationalised industry investment is capital-intensive, and individual projects, such as power stations,

railway electrification, and new coal mines, often take a long time to complete. The same is true of some public works such as roads. It may therefore be difficult at short notice to find suitable public investment projects to compensate for a flagging in private investment, and stability may be better achieved by changes in policy which are designed to influence the more flexible kinds of private investment. There have been a large number of fiscal and other policy measures specifically designed to influence private investment in the postwar period. In some countries, these measures have had a fair degree of success and in all cases they have made some impact on fixed investment even though it may have been a delayed one. It has not so far been possible, however, for governments to exercise any significant influence on inventory investment.

In fact, the investment plans of the public sector are often not co-ordinated, and different public bodies make separate investment decisions — either different ministries of the central government, different local government authorities, or the administrators of the different public enterprises. In many cases, therefore, the government's potential capacity to control public investment to promote economic stability has not been fully exploited.

In France, however, there has been co-ordinated investment planning since 1946, when the Commissariat Général du Plan was set up, and it has produced three major investment plans for 1947-52, 1954-57 and 1958-61. The plans included targets for investment in private as well as public enterprises and housing, because the Government provides finance for private industry in the form of loans, subsidies and guarantees for modernisation and re-equipment. French government investment has been designed to stimulate long-term growth rather than to offset short-term fluctuations in the private sector (10). In 1959, for instance, public investment was substantially increased in spite of the restrictive character of general government policy. The flagging of public investment in 1952-53 was also an act of policy in a period when the second plan was postponed and, although the stimulus to housing in 1953 helped recovery from the recession, the housing programme continued to expand in the inflationary years of 1955-57.

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(10) In fact, the postwar business cycle in France has been dominated by the government sector both in regard to investment and consumption. For this reason, the French cycle has always been rather different in timing from that in other countries.

In the United Kingdom, it has been difficult to modify the investment of public bodies for anti-cyclical purposes because the nationalised industries are fairly autonomous. However, since 1956, the nationalised industries have been financed directly by the Government through the budget and the central government exercises fairly strong financial control over local authorities via grants-in-aid and variations in the willingness of the Public Works Loan Board to grant loans. Public works and public enterprise investment were not used to stimulate recovery in 1952, but they were restrained as part of an anti-inflationary policy from 1956 to 1958, and raised in 1959 when there was a fall in private investment.

Housing construction has been varied for anti-cyclical purposes in the U.K. although it does not always respond too quickly to policy changes as public housing is carried out by a very large number of local authorities. In 1952-53 the increase in house-building was a powerful stimulant to recovery, and at that time impetus was given by financial measures and the abolition of building licences which stimulated investment demand dammed back by previous restrictions. The housing boom went too far in 1955, when there was general inflationary pressure, and in 1958 it was difficult to restart quickly.

The United Kingdom has made frequent changes in fiscal policy which have been specifically designed to affect private investment. Changes in depreciation allowances have been made in order to restrain or to encourage investment. Investment allowances — depreciation allowances greater than the cost of the assets — have been granted and removed in order to encourage and restrain investment. The rate of profits tax has also been varied for anti-cyclical purposes. Undistributed profits were taxed at a lower rate than distributed until 1959 in an effort to stimulate the general level of investment. These measures have all undoubtedly had some effect on investment but in most cases they were slow to have their impact and therefore not entirely successful as anti-cyclical weapons.

In the U.K. there has, of course, been considerable variation in monetary policy which has had some influence in restraining investment in booms but not nearly as much as in Germany. The British government has not ordinarily extended large amounts of credit directly to private industry, although in earlier years it had a negative control over access to new capital via the Capital Issues Committee. Recently, however, it has granted financial assistance to promote

investment in steel, shipping, and the relocation and reorganisation of the motor car, textile and aircraft industries. These measures had a more or less immediate impact on the industries concerned.

In Germany (11) control over State industries has not been used for anti-cyclical purposes. German fiscal policy has been used to promote a high general level of private investment rather than for anti-cyclical purposes. Until 1956 undistributed profits were taxed at a lower rate to foster investment, but they are now taxed more highly than distributed profits in order to encourage the creation of a capital market. Tax privileges have been granted for certain kinds of savings — housing bonds, shipbuilding loans and equalisation of war damage — and the government has also subsidised certain kinds of saving. Accelerated depreciation was allowed on war damage, residential property, industrial, commercial and agricultural plants, and a large number of short-lived assets were allowed to be written off in the year of purchase. The government also supplies substantial investment funds to industry via the Kreditanstalt für Wiederaufbau. The main anti-cyclical weapon has been monetary policy which has been more effective, both in checking and in stimulating investment, than in other countries, because of the wide range of monetary weapons used, the illiquidity of German business following the currency reform and the greater role of the banks in supplying funds for long-term investment than in other countries. The authorities have varied credit facilities and subsidies for housebuilding for anti-cyclical purposes but there has been some reluctance to check housebuilding in time of boom because of the serious shortage of accommodation.

In Sweden (12), government control over investment has been exercised more effectively for anti-cyclical purposes than in most other European countries. Not only have there been variations in public works and nationalised industry investment but private investment has been very powerfully influenced by fiscal policy. A 12 per cent tax on investment was levied to restrain inflation in 1951 and again in 1955, and these taxes were removed when a stimulus to investment was desired in 1953 and 1957. Firms received fiscal

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(11) Cf. Henry Wallich, *Mainsprings of German Revival*, Yale, 1955, for a description of German developments.

(12) Cf. Erik Lundberg, *Business Cycles and Economic Growth*, London, 1957, for a description of Swedish policies up to 1956.

encouragement to accumulate tax-free investment reserves in boom years from 1955 to 1957, and in the 1957/58 recession they were given permission to spend them. In the early post-war years depreciation rates could be fixed freely by firms but this freedom was curtailed in 1950 and again in 1955, when there was pressure of demand. The authorities have also exercised considerable control over housing investment for anti-cyclical purposes and have given general directives to insurance companies on the allocation of their investment funds. The success of these measures may be judged by the fact that investment increased by 12% in the recession year 1958. In Norway the range of government measures to affect investment has been similar to that in Sweden.

In the Netherlands, the government has also used a large number of fiscal devices to influence private investment. Control over housing construction is very extensive (although it is diffused through many local authorities as in the U.K.), and there are licensing controls for all construction. When demand was slack in 1953, depreciation allowances were increased, corporate tax concessions were given according to the rate of investment by firms, and the general level of corporate taxes was reduced. When demand pressure increased in 1955, the rate of depreciation was substantially reduced and the timing of corporate tax collections was accelerated. In 1957, corporate taxes were raised and tax concessions for investment removed. There were also cuts in public works and in housing. In 1958 when there was a fall in activity, most of the earlier stimulants to investment were restored. In Belgium, there is less extensive control over housing, and less use of fiscal policy to influence investment than in the Netherlands. Nevertheless, there have been tax concessions to favour investment as in the Netherlands, as well as subsidies for certain kinds of investment, differential taxation of distributed and undistributed profits and changes in the period of carry-over for business losses. Public works expenditure and housebuilding have also been varied for anti-cyclical reasons.

Consumption. Consumption is not a particularly volatile element of demand and tends to increase steadily in years of boom or mild recession more or less in line with the increase in personal disposable incomes, although there was a period in all European countries when it rose more slowly due to the increase in the personal savings ratio. However, governments have often wanted to influence

consumption, not only because they have considered it to be excessive or deficient, but to compensate for movements in other demand factors which they either did not want to or could not directly modify.

Governments can influence consumption by modifying the flow of personal incomes, by changing incentives to save, or by measures affecting prices. The first of these methods was the one principally considered in the early literature on anti-cyclical policy, and in recent American discussion of government anti-cyclical action. In Europe, however, the other two less orthodox methods have been just as widespread.

There are considerable difficulties in raising and lowering the general level of direct taxation. It is politically unpopular to raise taxes, and few rises in direct personal taxation as an anti-inflationary device have been used since the Korean war. In the past few years the general tendency has been for tax revenues to rise faster than G.N.P. and as the government share of total expenditure has generally fallen, an anti-infiationary effect has generally been secured simply by the absence of tax reductions. A general lowering of taxes to stimulate demand is usually popular but may create inflationary difficulties for the future. Such measures can also be thwarted by changes in savings habits. A general stimulus to consumption was given for anti-cyclical reasons by direct tax reductions (although there were also specific consumption stimulants) in the British budgets of 1953 and 1959, and the German tax reductions in 1953 served a similar purpose. Some direct tax reductions such as the Dutch or British of 1955 have not had an anti-cyclical impact, but exaggerated the inflationary problem. In general, tax cuts were more widespread in 1953 and 1954 following the cut down in armaments than they were in the 1958 recession.

In some cases, governments have attempted to affect the flow of income by trying to influence the level of wages. In nearly all cases, this has been limited to exhortation to keep wage claims in check in time of inflation. Only in the Netherlands and France has government influence on wages been used both to check inflation and to promote expansion. The Netherlands is the most open of the European economies, where there is a great public awareness of the effect of wage increases on the international competitive position of the country. In 1951 real wages were cut by 5% to meet the payments difficulties of the Korean crisis, and there was no

further general round of wage increases until 1954 when they were raised twice by a total of 13% to stimulate demand. In 1955 wage increases were limited to 3% but attempts to differentiate wage increases broke down in 1956, when most wages rose by 9%. In 1957 and 1958, the unions agreed to wage restraint. In 1959 the government again tried a policy of differentiated wage increases. Apart from these general increases in wages, the government has, on several occasions, agreed to wage increases specifically designed to compensate for its policy changes, *e.g.* for increased pension contributions in 1957 or the abolition of rent controls and milk subsidies in 1959. Generally speaking, the Dutch system has not stabilised the growth of incomes, but has attempted alternately to check and boost them in an anti-cyclical manner. It is obvious that wages policy has given the government a major instrument for controlling the general level of consumption, but its control is far from complete and there have been periods of extremely favourable balance of payments alternating with inflation.

In France, there is no wages policy as in the Netherlands, but government influence on wages is larger than in most other countries. The legal minimum wage (S.M.I.G.) and indexation of wages have played a leading role because of the prevalence of inflation and the weakness of unions. Thus. an important element in French recovery in 1954 was the increase in consumption generated by the 5% increase in the minimum wage at a time when prices were stable or falling. During the inflationary period from 1955 to 1957 wage increases were combatted by manipulation of subsidies to keep the cost of living index from rising as had been the practice in many countries in the early postwar years. At the end of 1958, an important part of the stabilisation programme was the abolition of wage indexation.

Some governments have attempted to influence the general level of consumption by offering special incentives to savings. The French government has from time to time floated bonds with tax free interest payments, and savings premia were introduced in Sweden in 1955. In the U.K. a tax-free premium bond scheme was introduced in 1956 and has since been maintained. Perhaps the greatest number of fiscal incentives and subsidies to savings have been given in Germany, although they have not been used anti-cyclically. It is questionable whether these schemes have much

affected the general level of saving rather than the particular channels to which savings are devoted.

In the U.K. there has been frequent use of measures to influence consumption of durables. Purchase tax was reduced in 1953, raised in October 1955, reduced in 1958 and again in 1959. Hire purchase restrictions — fixing the size of minimum deposits and the maximum maturity of debt — were abolished in 1954, reintroduced in spring 1955, tightened in the summer of that year, and again in February 1956, relaxed in the summer of 1958, abolished in October 1958, and reintroduced in a mild form in the spring of 1960.

In Sweden a 12% excise duty on cars was introduced in 1956, taxes on alcohol were raised, and conditions for consumer credit were stiffened (with differential controls for individual commodities). In January 1960 a general 4% sales tax was introduced to curtail consumption. The Dutch authorities had a tax on cars from 1951 to 1955 and have also had consumer credit controls (1956 and 1957) for anti-cyclical purposes. Consumer credit controls have also been used in Denmark and France.

Changes in purchase taxes and consumer credit have generally had a substantial and immediate impact on specific sectors of the economy where the pressure of demand was raising prices and imports. They have, of course, had certain adverse effects on the costs of the industries concerned and involve discrimination against particular consumers and producers. However, the advantages outweigh the disadvantages in cases where the measures are applied in time and in small doses, for they tend to even out demand for the producers concerned.

Foreign Trade. A major obstacle to full employment or expansionary policies in the prewar years was the fear that neighbouring countries would not move similarly, and that the expanding country would run into balance of payments difficulties. These fears were so widespread that there was a general and self-frustrating move to export unemployment by restrictive "beggar your neighbour" remedies. It is, perhaps, the biggest achievement of the postwar years that the leading economies are dedicated to full employment and there is enough mutual confidence and enlightened self-interest to face the risks of expansion together. Postwar co-operation was initially fostered by the lessons of the 1930s, by the willingness of the U.S. to act as a good creditor, and to some extent in Europe it

was engendered as a response to political pressure from the East. However, constant mutual consultation, frank discussion and intimate knowledge of each other's economies and their problems have made co-operation a habit which most governments now regard as indispensable to the proper formulation of policy. Co-operation has been institutionalised by the creation of powerful international organisations of which the most important have been the O.E.E.C., the I.M.F. and the G.A.T.T. In spite of the fact they have not had supra-national powers, these organisations have had powerful sanctions and safeguards at their disposal, of which the most important have been the possibility of extending credit in time of need, and assuring reciprocity for trade concessions. Countries in a position of strength have reduced trade barriers and increased capital exports, and retaliation has not been taken against countries which have been forced temporarily to restrict trade, or which have devalued their currencies. With these sanctions they have been able to enforce good behaviour on countries in difficulties — ensuring that they took adequate stabilisation measures and that restrictions on trade were removed at the earliest possible moment.

As a result of this mutual confidence and these institutional arrangements, it has been possible for European countries to eschew most of the restrictive and discriminatory policy weapons which they acquired in the prewar and early postwar years. Countries have virtually returned to the currency convertibility which seemed so dangereous in the 1930s and they have done this with fixed exchange rates. Quantitative restrictions are rapidly disappearing and have not been used by any major country except France to meet newly emerging balance of payments difficulties since 1953. Export subsidies have been more or less abolished. Discrimination in quotas and payments regulations has also virtually disappeared. There has been a complete absence of competitive exchange rate adjustments. Tariffs have not been raised for anti-cyclical reasons; in fact, there was a unilateral lowering of tariffs by Germany in 1956 and 1957 in an attempt to reduce its payments surplus.

It is obvious that the return to open economic systems has had considerable advantages in stimulating competition and in improving the allocation of resources, but it also involves certain risks. The possibility of de-stabilising hot money movements has been greatly increased, governments have to rely on a narrower range of corrective

policy instruments, and disequilibrium in the domestic demand situation is rapidly reflected in the balance of payments.

There have been periods when international equilibrium was put under very considerable strain, most notably in 1957 when a serious currency crisis arose because of the failure to take appropriate policy measures in time and because of the large potential for speculative movements. There is nothing in the present institutional arrangements to prevent a recurrence of such situations, but at least the 1957 crisis gave belated proof that governments have effective policy weapons, and that there is enough international solidarity to prevent a serious breakdown in world trade. It also showed the effectiveness of the I.M.F. resources (now greatly enhanced) in meeting major payments crises. Although considerable possibilities for short-term speculative capital movements now exist, it is clear that the international payment system is less prone to collapse than in prewar years because of the dominance of government transactions in international capital movements. These government flows of grants and loans have been much more stable than private capital and have been varied to meet longer-term needs. In the period 1953-58 more than half of the $10 billion capital flow from Europe (to the outside world) was governmental, and this was also true of the $20 billion flow from the U.S. Private capital movements are now heavily concentrated on direct rather than portfolio investment, so that even this is less volatile than in the prewar era when capital flight was a major cause of the 1931 breakdown.

In spite of the improved institutional arrangements for co-operation, however, the main safeguard is that the big countries which are capable of generating large fluctuations in the world economy have acquired good neighbourly habits. The United States gave an excellent lead to Europe in the early postwar years by providing very substantial aid and tolerating trade and payments discrimination against herself. In the past decade, the competitive position and the reserves and payments strength of Europe have grown steadily. European countries have reacted to this by reducing trade barriers and by increasing capital exports. All the major trading nations have felt the benefits of good neighbourly behaviour in times of difficulty. The U.S. has recently had a balance of payments problem for the first time since the war, the U.K. and France have frequently experienced difficulties, and even Germany had a deficit in 1951.

For these reasons, the economic warfare of the 1930s has disappeared, there has been a general return to fairly open economies and an abandonment of policy weapons which restrict trade or impede expansionary policies in other countries. It is clear, however, that there is still a great deal of instability in the international economy, that conflicts of economic interest do frequently arise, and that public and even political opinion does not fully recognise the virtues of reciprocity or the danger of destroying it by restrictive measures, even though there is sufficient understanding and solidarity to prevent a major collapse. Government policy and international institutional arrangements will need constant improvement if a reasonable equilibrium is to be preserved.

V. Conclusions

For about half of the postwar period European demand was maintained at a high level by extraordinary backlogs inherited from the war or the prewar period of depression and by rearmament. Whilst these factors were operative, the pressure of demand on resources was extremely high and prices rose more or less steadily. These forces were stronger in Europe than in the U.S., and were stronger than those felt at the end of the first world war.

These special demand factors disappeared several years ago, but it is clear that the long experience of full employment has given the economies of most countries a momentum which continues to sustain demand at high or even inflationary levels. The main forces of this nature are the tendency for wage rates to rise steadily and for entrepreneurs to keep investment on a high level.

There is little evidence that the normal functioning of the private forces within the economy is more *stable* than in prewar years, but because of government intervention the normal range of fluctuation is not now given free play. Although, governments cannot claim to have done more than moderate fluctuations, they have succeeded in ensuring that they take place at a higher level of activity, so that oscillations in the degree of inflation or payments equilibrium have been bigger than those in employment or output. The two mild postwar recessions in Europe have, in fact, been due to a considerable extent to government policies to restrict inflation or restore payments equilibrium.

Governments have found the buoyancy of the postwar economy useful insofar as it enabled them to keep output and employment at high levels and to recover fairly easily from the mild recessions which have occurred. But it has also been an embarrassment in hindering price stability or payments equilibrium, and most governments have given growing emphasis to moderating wage increases. Insofar as they succeed in doing this, they will also tend to take some of the buoyancy from investment demand — if not the part due to the anticipation of steady economic growth, at least the part due to anticipation of price increases. A smaller degree of "buoyancy" or "momentum" in the economy would require governments to take more measures to secure economic growth. In some cases, this might well produce faster growth than a situation in which governments feel that they have to lean against the prevailing winds of inflation and let economic growth take care of itself.

Apart from the impact of government policy, there may be factors which will tend to weaken the momentum of demand in the longer run. The high investment levels of the past few years have given us a capital stock with a low average age, and have reduced the need for replacement. It is also conceivable that a relaxation of international tension would lead to substantial reductions in military expenditure. However, it is easy to think of ways in which such a slackening could be compensated by public investment in roads, schools, hospitals and urban redevelopment, or by government-stimulated housing construction. There is massive scope for raising European consumption closer to American levels, and there are obvious ways in which demand for consumer goods could be stimulated by tax reductions. There is therefore no reason to assume that "autonomous" demand forces in the future will lead to stagnation, or that they could not be compensated if they did flag. The danger of serious stagnation arises only when governments let deflationary forces gain substantial momentum.

The anti-cyclical role of government has increased considerably, but developments in Europe have differed from those in the U.S. As a redistributor of income and a controller of investment, government responsibilities have grown substantially since prewar and are certainly greater in Europe than in the U.S. Direct public consumption has grown somewhat since prewar in some countries but has fallen in others — only in Sweden has the rise been as dramatic

as in the U.S. However, the increased share of government in economic activity has not, in itself, been a major stabilising factor, as government expenditure on goods and services has at times been fairly volatile, and the increased government control over investment and income distribution has not always been fully exploited for anti-cyclical purposes. The anti-cyclical influence of governments has been exercised largely by deliberate policy measures destined to influence the movement of activity in the private sector of the economy. In most countries a wide range of selective fiscal and monetary policy weapons and a few direct controls have been brought to bear on the most volatile sectors of demand. In this respect, there has been a considerable difference between the general European situation and that in the U.S. where there has been much less use of selective policy measures, and a heavier emphasis on general monetary policy and automatic budgetary stabilisers. There is, of course, some degree of "built-in stability" in most European budgets. However, it is generally less important than in the U.S., and has increased less since prewar years. Most European countries have revenue collection systems which are less progressive than in the U.S. and involve greater time lags, so that government receipts are not so sensitive to movements in private income as in the U.S. European transfer payments are generally large but they tend to be fixed rather than to compensate movements in private income.

There are a number of ways in which there is scope for governments to increase the effectiveness of their anti-cyclical policies which would be reconcileable with other major policy objectives. Better information on economic trends would help in the formulation of policy and would provide a basis for intelligent public discussion of policy issues. In this respect, all European countries lag far behind the U.S. both in the amount of useful data collected and the degree of analytical processing it receives, *e.g.* in the form of seasonal adjustment. It would also be helpful if budgets could be rearranged to show more clearly the impact of public finance on the economy, and this in turn would make it easier to vary taxes in the course of the year rather than waiting for a fixed budget day which may not be optimal for policy changes, and which often provokes adverse speculative movements. In a number of countries the timing of tax collection could be improved to vary more closely with the movement of income. There are wide variations in the range of policy measures used by different governments, and a

more detailed comparison of the successes and failures of neighbouring countries would provide a fund of experience on which many governments could usefully draw. There are also measures which are relatively untried such as wages policies or control of inventory movements, and here the future may bring considerable innovations. Apart from measures to affect the private sector, governments could also make a major contribution to stability by a better co-ordination and advance programming of central and local government capital spending.

Governments have enjoyed a very large degree of international economic co-operation in the postwar period which has enabled them gradually to discard protectionist weapons and to move towards freer trade and greater convertibility. The European economies are now almost as open as they were in the 1920s. There are, of course, much greater sources of international credit than there were in the 1920s and there is a much greater common understanding of the principles of good behaviour in international economic policy. It has been worth taking the risks involved in these open policies, but the extent to which European economies depend on the goodwill and economic judgment of neighbouring countries should not be forgotten.

Paris ANGUS MADDISON

Radcliffe Report: Monetary Policy and Debt-management Reconciled?[1]

The *Report* (2) of the Radcliffe Committee is bound to be regarded for a great many years as an indispensable textbook on Britain's financial system, the product of the first full-scale study of its monetary system since 1931. It provides the nonspecialist with a full description of financial institutions and the specialist with unexpected factual riches. In addition, it presents perhaps the most comprehensive survey of the mechanics of Treasury financing in our literature.

Any inquiry "into the working of the monetary and credit system" must necessarily deal with complex and controversial material; the members of the Committee are to be commended for their attempt to include arguments on opposite sides of a wide variety of analytical and policy questions. Nonetheless, their decision not to concentrate their recommendations but to scatter them throughout the 339 page *Report* has not made it easy to pick out the main lines of the argument. Furthermore, the sections of the *Report* are amended and qualified in many places, perhaps the inevitable mark of a unanimously-approved group document: the text reveals ambiguities, cross-opinions and even inconsistencies.

The difficulty in ascertaining exactly what the members of the Committee meant to say on many points is particularly evident in the materials on debt-management and monetary policy which lie

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(1) The author is an economist in the Division of International Finance, Board of Governors of the Federal Reserve System. The conclusions presented in this paper represent the personal opinions of the author and do not reflect the views of the Federal Reserve Board.

(2) Committee on the Working of the Monetary System *Report*, Cmd. 827, H.M.S.O., London, August 1959. Unless otherwise indicated, all page references in this paper are to this *Report*. Later, in mid-March 1960 the Radcliffe Committee released these additional documents: *Minutes of Evidence* (1960), a complete record of the oral evidence taken by the Committee; and *Principal Memoranda of Evidence* (1960) in three volumes.

at the heart of the *Report* and seem to have become the primary concern of Committee members. In these areas, the reader comes upon novel and controversial conclusions. For example, the *Report* proposes as one of " the main ideas " which emerges from the Committee's work the proposition: " In our view debt management has become the fundamental domestic task of the central bank " (p. 337). The American, in particular, is bound to react to so sweeping and curious a conclusion with uneasiness, if not with a touch of incredulity; he knows, as a practical fact, that debt management in the United States is the exclusive responsibility of the Treasury under our legislative arrangements, with only a fiscal agency role for the central banking system.

By what steps did the members of the Committee come to this unorthodox view of the relationship between debt-management and monetary policy? At the risk of being arbitrary or too subjective, it would be my suggestion that there are four propositions which seem to provide the analytical support for the conclusions of the Committee members in this central area of financial affairs.

Four principal analytical propositions

To begin with, the members of the Committee specifically reject the view, now widely accepted in most countries of the Free World, that " the central task of the monetary authorities is to keep a tight control on the supply of money " (p. 132). While not " an unimportant quantity ", the supply of money is only " part of the wider structure of liquidity in the economy " (p. 132). Thus, banks are not important because they are " creators of money " but because they are " key lenders in the system " (p. 134). Furthermore, " the level of bank advances rather than the level of bank deposits... is the object of this special interest ".

Their second proposition is to substitute " this wider structure of liquidity " for the money supply as the focus of central bank operations. Here the argument follows familiar lines. In their view, the decision to spend depends " upon liquidity in the broad sense, not upon immediate access to the money ". In other words, " the spending is not limited by the amount of money in existence; but it is related to the amount of money people think they can get hold of, whether by receipts of income (for instance from sales), by disposal of capital assets or by borrowing " (p. 133).

Thirdly, the members of the Commitee insist upon "the structure of interest rates rather than some notion of the 'money supply' as the centre-piece of monetary action" (p. 134). This undoubtedly is the most sweeping and controversial theoretical conclusion. There are, in their words, two ways by which interest rates may affect total demand. One is the interest-incentive effect by which a change in interest rates can "induce a change in the incentive to purchase capital goods"; the Committee "sought, without much success, for convincing evidence of its presence in recent years" (p. 130-1). Secondly, there is the general-liquidity effect in which the authorities affect "the availability of funds to borrowers through particular channels"; this effect "can be altogether more peremptory" since "if the money for financing the project cannot be got on any tolerable terms at all, that is the end of the matter" (p. 131). This general-liquidity effect, like the so-called Roosa-effect introduced in the literature about ten years ago (3), is concerned with changes in interest rates on "the lending behaviour of an indefinitely wide range of financial institutions" (p. 134). The structure of interest rates has a key role because "for institutional reasons" movements in rates "change the liquidity of financial operators throughout the economy" (p. 134). The Committee goes on to maintain that, if the authorities are "inhibited in their manipulation of interest rates, no mere control of the supply of money can be expected to do much".

As the fourth point, they conclude that the central bank should attempt to control the liquidity of the private sector by "taking a view on long rates rather than short, and should be using their power as managers of the National Debt deliberately to forward an interest policy"; in addition, the monetary authorities "should give public expression of these policy intentions for the benefit of the market" (p. 178). For these reasons, the members of the Committee maintain that "it is not merely that monetary action and debt management interact so that they ought to be under one control: they are one and indivisible; debt management lies at the heart of monetary control" (p. 224).

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(3) See ROBERT V. ROOSA, "Interest Rates and the Central Bank", in *Money Trade and Economic Growth* (Macmillan Company, New York, 1951): "It is principally through effects upon the position and decisions of lenders, and only secondarily through effects upon the decisions of borrowers and savers, that central bank action affecting interest rates achieves its significance" (p. 294).

Yet the practical recommendations which follow prove that these radical propositions have more bark than bite. In the first place, the description of Britain's banking mechanism, as it is admirably detailed in the *Report*, reveals that the generalizations are not intended for universal application but are uniquely designed to fit the political and economic circumstances and to be fitted into present financial practices in the United Kingdom. The suggestions would require no radical change in financial practices there. Debt management is already a central operating preoccupation of the Bank of England, and the dominating trading activities of the Government Broker, which are already an integral part of gilt-edged practices in London, would not have to be substantially changed; the Committee's recommendations would require only that the wording of his instructions be modified. Secondly, the practical consequences for Treasury financial policies which emerge from the analysis are exceedingly moderate: the Committee would merely have the Treasury (a) offer relatively high rates on its securities at all times and (b) attempt to maintain an uninterrupted flow of securities into the hands of nonbank investors at these attractive yields (4). Let us proceed to a detailed discussion of these two points.

How the British credit system works

The Radcliffe *Report* reveals that the Bank of England's debt-management responsibilities are interpreted in practice to require the Bank to provide residual finance for the Exchequer. These residual cash needs vary widely over time; the British practice is to meet these variations by means of fluctuations in the supply of Treasury bills. Furthermore, the money market is managed by the Bank in such a way that the banking system (i.e., the discount houses and the clearing banks) can absorb these fluctuations in the supply of bills; the authorities assist the banking system because they consider that " the market could not, unaided, absorb the variations in the Government's requirements, except at the cost of extreme variations in bill rates " (p. 216).

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(4) These propositions seem to grow out of the Committee's concern about control of liquidity as the key to the achievement of sustained expansion in Britain without inflationary or balance-of-payment disturbances; it is unexpected that the *Report* does not deal directly with economic policies to achieve a smoothing out of fluctuations in business activity over the kinds of business cycles experienced in the postwar period.

The decision to aid the banking system reflects the official view of "the market in Treasury bills as narrowly limited, so that relatively higher rates would not attract additional buyers; the authorities would still in the end have had to help the market by themselves buying some of the Bills" (p.215).

Residual Exchequer finance. The authorities have chosen to provide assistance to the market indirectly "either by open market operations in the money market or by lending against bills or short bonds at the Discount Office... to enable the discount houses to take up Treasury Bills allotted to them in the tenders" (p. 40). In this way, "any part of the overall cash deficit which is financed by no other means, and any seasonal deficit, can be financed by borrowing from the market by the issue of Treasury bills" (p. 38). The authorities "prefer the residual financing of the Exchequer to be indirect rather than the direct provision of credit by the central bank" (p. 40).

The practice of providing indirect finance of Exchequer requirements in this manner is the fundamental change which has transformed Britain's credit mechanism since the Macmillan Report in 1931. These arrangements mean that the Bank of England can no longer control the volume of bank reserves through the traditional central banking instruments of Bank rate and open-market operations; they also mean that "cash and Treasury bills have come to be practically interchangeable" and that "the supply of Treasury bills and not the supply of cash has come to be the effective regulatory base of the domestic banking system" (p. 216).

This transformation in Britain's banking arrangements has forced the authorities to search for credit-control devices to supplement traditional monetary instruments. The principal new device has been the "funding" policy or the attempt of the authorities to sell bonds to nonbank investors in order to avoid additions to the liquid assets of the banking system.

Capacity of gilt-edged market. Two circumstances unique to Britain help to explain how the authorities have come to depend upon "funding" for credit-control purposes. In the first place, the gilt-edged market in London has the capacity to absorb substantial Treasury cash issues each year as well as to refinance maturing issues. Even though nonbank holdings of Treasury bills in Britain are meager, the market for intermediate and long-term government bonds is substantial and the trading volume heavy. The gilt-edged

market is a major source of strength in Britain's financial structure. In 1957, for example, the banking system and official overseas holders accounted for 87 per cent of Treasury bills but only 34 per cent of marketable bonds outstanding; private individuals alone held 21 per cent of marketable bonds. (See Table 1).

TABLE 1

UNITED KINGDOM AND UNITED STATES: COMPARATIVE DATA ON GOVERNMENT MARKETABLE SECURITIES HOLDINGS BY TYPE OF HOLDER, MARCH 1957

(In per cent of privately held debt)

	Treasury bills		Bonds and other market issues	
	United Kingdom	United States	United Kingdom	United States
Banking system	50	11.4	22	32.8
Overseas holders	37	19.4 (a)	12	1.1
Financial institutions (other than banks)	1	2.8	18	12.5
Other home holders	(b)	66.4	26	53.6
Unidentified (b)	12	—	22	—
Total (in per cent)	100	100.0	100	100.0

(a) Includes some certificates of indebtedness.

(b) No separate figure in shown for " other home holders " of Treasury bills; they are included in an " unidentified " item which covers all other holders and statistical and valuation differences.

Sources: United Kingdom, Radcliffe *Report*, Table 28, pages 198-9; United States, Federal Reserve *Bulletin*.

Furthermore, the total market value of all Treasury marketable bonds during the past decade has been about equal to the value of all other outstanding securities on the London Stock Exchange. These bonds are widely traded. During the past decade, the annual turnover of short bonds is estimated to have about equaled the total bonds outstanding, the turnover of intermediate bonds (5 to 10 years) at about 40 per cent on the average and that of undated bonds (without final maturity date) at around 20 per cent of the outstanding volume (p. 203).

In important technical respects, the gilt-edged market in Britain may be compared with the Treasury bill market in the United States. Just as the banking system in Britain holds only a minor proportion of bonds outstanding, the commercial banks in the United States

hold only a minor portion of outstanding Treasury bills; as may be seen in Table 1, United States commercial banks in mid-1957 held only 11 per cent of outstanding Treasury bills but 33 per cent of marketable bonds (including certificates and notes). There is a further technical parallel in central banking policies in the two countries which is not altogether accidental; the "funding" policy which the United Kingdom depends upon for credit-control purposes makes use of the capacity of the London gilt-edget market, just as the "bills only" policy in the United States seeks to concentrate security transactions for credit-control purposes in a broadly-based Treasury bill market.

Yet the growth of a broadly-based gilt-edged market in London has not been a contemporary development. On the contrary, this market developed a great many decades ago; furthermore, the market's capacity has probably contracted, not expanded, since 1945. Back nearly a hundred years, for example, the market for Consols in London was described in a guide to country bankers in these words:

> They (Consols) are the one security which you can, with absolute certainty, turn into cash at any hour of any business day in the worst throes of panic. You can not rest assured of this in respect of any other description, even, of securities of the British Government itself. Your Consols are virtually so many Bank of England notes in a latent form, but with this advantage, — that they yield you 3 per cent whilst practically forming a portion of your till-money (5).

Role of Government Broker. In the second place, substantial official trading in the government securities market is a practice long-established in Britain and accepted by bond traders and by investors. Even though it is known that the Government Broker (as agent for the Bank of England and the Treasury) trades actively at all times and in all maturities in the gilt-edged market with official resources, the private trading community apparently continues to act on the belief that bond prices are responsive to underlying demand and supply conditions and are not arbitrarily determined by official trading.

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(5) George Rae, *The Country Banker* (London: John Murray, 1885), pages 214-5.

The Government Broker is accepted by the market as the wholesale source of supply for bonds of all maturities, much as a specialist trader operates on the New York Stock Exchange. He also is used by the authorities to carry out the underwriting of new Treasury issues.

The authoritative description the *Report* gives of the mechanics of Treasury underwriting reveals the central role these operations play in Britain's credit mechanism (6). For these purposes, the authorities rely on the portfolio of the Issue Department. Once the public's applications for a new bond offering have been filled, the remaining bonds (commonly most of the issue) are taken into the Issue Department's portfolio. These bonds are " gradually sold to the market through the Government Broker over the following weeks and months, at the market price... on the date of sale " (p. 37). When bonds are turned over to it, that Department is " obliged to reduce its lending to the Exchequer " by reducing its Treasury bill holdings; in turn, the Exchequer is " forced to borrow more from the market by the issue of Treasury bills " (p. 30). The Exchequer sales of Treasury bills to the market expand the liquid assets of the clearing banks. On the other hand, the liquid assets of the banks are reduced when the Department sells bonds to the gilt-edged market. That Department can lend the proceeds of its sales to the Exchequer, and the Exchequer can then buy bills back from the market. In this way, bond sales by the Government Broker (the so-called " funding " operations) have the effect of putting the banks under liquidity pressures.

Two aspects of these arrangements should be noted. In the first place, the Exchequer always obtains cash from the issue of new securities even if the bonds remain in the hands of the Issue Department, unpurchased by the investing public. The banking system acts as lender of last resort as needed, aided by the authorities to carry the requisite volume of Treasury bills. Secondly, the willingness of the public to buy bonds becomes the crucial element in the British banking mechanism. The perverse effect of official policies when bonds are not saleable can be illustrated by events in mid-1955 when the authorities encouraged the nationalized industries to offer bonds to reduce their abnormally large bank loans. Because the

(6) See *Report*, pages 30, 36 to 40 and 213-14; *Minutes of Evidence*, questions 1762 to 1789; and *Principal Memoranda of Evidence*, Volume I, pages 82-83 and 105 to 109.

public would not buy the offerings, the authorities found that they " were obliged to increase the total of Treasury bills... to finance the nationalized industries until... the Issue Department had sold the stock which it took up at the time of issue " (p. 30). The nationalized industries received their cash from the bonds in routine fashion and applied the receipts to reduce their bank loans. To the extent that additional bills were taken up by the banking system, however, the net result of this endeavour to replace bank loans by long-term bonds was to reduce the loans and increase the liquid assets of the clearing banks, quite the reverse of the intended effect.

Thus, the crucial significance of " funding " as a credit-control device lies in the fact that " net sales of stock enable the authorities to finance an Exchequer deficit without adding to the credit base of the banking system " (p. 38). Such sales are the means by which the authorities can avoid having to depend upon the banking system for residual Exchequer finance with its consequential addition to the liquid assets of the banking system. This fact explains why the Committee came to regard the activities of the Government Broker as " among the most important, and most central, of central banking operations " (p. 214).

High yields in order to sell securities continuously

It was the critical need in the British system for continuous security sales to the market which led the Committee to advocate that the Treasury rely upon relatively high rates to make its securities attractive. It recommends that the authorities accept " an interest rate structure that will ensure the desired structure of the debt " (p. 207). The authorities should " push the rate of interest to a level that is high enough to attract sufficient firm holders for the debt and yet consistent with a balance between demand in the public sector, demand in the private sector, and the available resources of the economy " (p. 208).

The Committee advocates high yields on Treasury securities as essential to a control of general liquidity. It enunciates " the principle that, except so far as its views influence market expectations (an important exception), it cannot choose both a rate of interest and the quantity of debt to be held at that rate " (p. 128). That is to say, the Treasury " cannot simultaneously choose both the structure of interest rates and the structure of the debt " (p. 129).

The Committee endorses without qualification the subordination of interest cost considerations to the need to attain the desired debt structure. It goes so far as to endorse the view that " a continuance of moderately high rates (judged by earlier standards) is reasonable even at times of slackness in production " (p. 213). These moderately high bond rates " are unlikely to prevent the revival in production " but if bond rates were lowered now " the lower rates and increased liquidity entailed might well be reached just in time to be a nuisance in the next boom ". It realizes that " moderately high bond rates and a large Budget deficit form an unusual combination as deliberate measures of economic policy, but it may well be the right one in a world which, despite recession, remains inflation-minded and growth-minded ". If this policy promotes full employment and steady growth, " it will probably in the long run be the easiest on the tax payer, despite the superficial appearance of a high interest charge on the debt " (p. 213).

In this way, high bond rates and the primacy of liquidity-control considerations over interest-cost considerations in debt-management policy become the cornerstone of the Committee's recommendations. These principles are unexceptionable, even by traditional banking standards, in Britain's present circumstances.

These strong views on interest-rate policies are likely to disappoint many observers in Britain and the United States who might otherwise welcome the Committee's attack on other aspects of central banking activities and policies. Many critics of central banking and of the recent use of monetary policy in both countries, the advocates of credit expansion and of cheaper money, have tended to urge that cost considerations be given a prominent -- not an insignificant — emphasis in formulating public debt policy. Recent controversy in the United States, especially in connection with the interest ceiling on Treasury bonds (7), makes it all the more impressive that nine men in England from labor, business, the law, the universities and banking could come to unanimous agreement on this critical recommendation. Could a comparable group selected in the United States come to unqualified agreement on a comparable recommendation?

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(7) Between 1952 and 1958, long-term saving institutions in the United States acquired $95.0 billion of new assets, of which fixed-income assets amounted to $86.1 billion; yet they

Selling bonds on a falling market

It is unfortunate that the members of the Committee were not content to confine their discussion of high rates to debt-management objectives. Instead, they felt impelled to look upon interest rates as a general tool of economic stabilization in the economy. Their confidence in interest rates for stabilizing liquidity rests in part upon the realities of British financial practices, as we have seen. They decided that proper interest rates could achieve the uninterrupted flow of securities to the market required to raise capital funds and to refinance maturing issues for the Exchequer. Yet recent experience in the United Kingdom, as summarized in the *Report* itself, does not provide grounds for optimism that interest-rate policy can effect a continuous increase in the securities holdings of the private sector over the business cycle.

The Committee's confidence that, with appropriate rates, the authorities could maintain security sales to the market apparently survived a continuing dispute with Bank and other officials during the hearings. These differences centered on the question: can the Treasury sell bonds on a falling market? (8). These officials "held the view that sales could only be made in any quantity on a rising market" (p. 203-4). The Committee held that the official judgment

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reduced their holdings of United States Government securities by $4.4 billion. The breakdown of these totals by institution and by type of asset (in billions of dollars) is:

Institutions	Treasury securities	Mortgages	Corporate bonds	Stocks	Other assets	Total
Life insurance companies	− 3.8	17.7	16.1	0.9	7.2	38.3
Savings and loan associations . . .	2.1	29.9	—	—	2.5	34.7
Mutual savings banks	− 2.5	13.3	1.4	0.7	1.0	14.0
Corporate pension funds	− 0.2	0.5	8.6	5.5	1.0	15.3
Total	*− 4.4*	*61.4*	*26.1*	*7.1*	*11.7*	*102.3*

Compiled from *The Investment Outlook for 1959*, Bankers Trust Co., New York, Tables 1 to 4.

(8) See *Report*, pages 202 to 207; and *Minutes of Evidence*, questions 1762 to 1809; 1841 to 1897; 2164 to 2171 (and appendix addendum page 954); and 11919 to 12065.

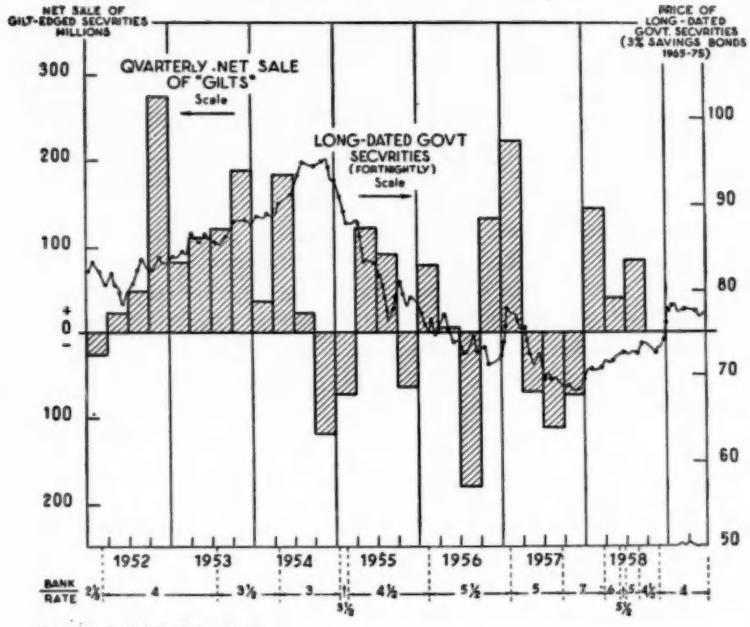
" that demand could not be stimulated by dropping prices — a view not easy to accept " led them to be " entirely passive, indeed fatalistic, in their attitude to the movement of long-term rates " (p. 204-5). The Committee's conclusion was to hope that more active official leadership in rate policy would resolve these difficulties.

The Committee rejected the arguments of the authorities which seem to have put the matter in terms of price expectations. Official witnesses reported that investors would buy bonds freely when yields were falling (prices were rising) but tended to delay purchases when yields were rising (prices were falling). On a falling market, the investors were guided by their " expectations of what prices will be tomorrow or next week " (p. 204) and tended to refrain from buying until yields had been stabilized. The Committee recognized this asymmetrical aspect of bond dealings; but they concluded that " expectations have been overrated as independent market forces, and that at times the influence of the authorities on these expectations has been correspondingly underrated " (p. 208).

Yet the difficulty seems to have been more than a matter of expectations. Apparently the authorities found themselves compelled to buy securities from the market, especially in 1956 and 1957, because the private nonbank sector actually reduced its security holdings. The Committee presented two pieces of evidence on this point. The chart reproduced on the following page compares sales of gilt-edged securities by the authorities and changes in market prices; it shows that they were able to sell securities when the prices of long bonds were rising (yields were falling) but found it necessary to buy bonds when prices were falling. There were substantial purchases from the market during isolated quarters in 1954 to 1956 and during three quarters in 1957. In fact, their net sales between 1955 and 1957 appear only barely to have exceeded their purchases. That is to say, during the private investment boom from 1955 to 1957, the authorities were not able to raise any significant part of their capital needs from the gilt-edged market. There was particularly heavy security attrition between April and December 1957.

The second piece of evidence is found in Table 2 which shows a calculation based on Exchequer financing statistics presented in the *Report*. In the second line from the bottom, a residual, roughly estimating official borrowing from nonbank sources, is calculated by taking the figures on total Exchequer market borrowing and deduct-

SALE OF GILT-EDGE SECURITIES BY THE AUTHORITIES AND CHANGES IN MARKET PRICES



Source: Radcliffe Committee

ing changes in the call money, Treasury bill and investment holdings of the London clearing banks. This residual calculation suggests that nonbank investors made net sales of gilt-edged securities in fiscal years, 1956-57 and 1957-58.

During the investment boom from 1955 to 1957, therefore, private investors were not prepared to purchase the Treasury's new capital offerings which then went into the portfolio of the Issue Department; in addition, to the extent that the authorities are shown to have bought securities from the market, investors reduced their holdings by sale or by failing to renew maturing issues during the year. The Exchequer was able to keep down its borrowings from the banking system against Treasury bills only to the extent that it could make use of the interest-free lending of the public through the increased currency in circulation and could mobilize the sterling-

TABLE 2

UNITED KINGDOM: FINANCING OF EXCHEQUER CASH REQUIREMENTS, FISCAL YEAR ENDING MARCH 31, 1951-52 TO 1957-58

(In millions of pounds)

	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
Cash requirements							
Ordinary surplus	380	88	94	433	397	290	423
Below-the-line deficit	-529	-524	-391	-501	-538	-621	-635
Over-all deficit	-149	-436	-297	-68	-141	-331	-212
Nationalized industries	-131	-275	-310	-171	-316	15	20
Total requirements	-280	-711	-607	-239	-457	-316	-192
Extrabudgetary receipts	27	108	146	170	98	122	87
Net cash needs	-253	-603	-461	-69	-359	-194	-105
Sources of finance							
Nonmarket borrowing:							
External transactions (a)	1,063	-127	-341	-175	120	201	-139
Note issue (b)	50	150	75	100	150	50	125
Small savings, etc. (c)	-369	-159	-16	78	-112	127	-6
Total nonmarket sources	744	-136	-282	3	158	378	-20
Market borrowing:							
Total (d)	-491	739	743	66	201	-184	125
Estimated from banking system	-321	304	197	-131	-196	-11	260
Estimated from nonbank sources	-170	435	546	197	397	-173	-135
Net Exchequer financing	253	603	461	69	359	194	105

(a) The sterling receipts from sales of foreign exchange by the Exchange Equalization Account and other foreign currency transactions of the Treasury.

(b) Government securities are held by the Issue Department against currency in circulation.

(c) Small savings bonds, tax reserve certificates and other nonmarketable securities.

(d) The total for market borrowing is found in the Report. Borrowings from the banking system are roughly estimated by taking the changes in selected assets of the London clearing banks (call money, Treasury bills and investments) as shown in their monthly statement. The nonbank borrowing total is a residual figure and a very rough estimate.

Source: Radcliffe Report, Table 6, page 41.

currency receipts of the Exchange Equalization Account from its substantial foreign-exchange losses.

These difficulties in financing the Exchequer outside the banking system made funding only a fair-weather instrument of liquidity control between 1955 and 1957, effective when money rates were falling but not when rates were rising. The Committee's prescription that high rates should enable the Exchequer to sell enough securities at all times to keep private liquidity in control is little more than the official funding policy, perhaps somewhat more zealously applied. This adverse experience was one of the principal points which British officials seem to have tried to make at the hearings and which the Committee in its optimism refused to accept. This optimism led the Committee to exaggerate the scope of official action on the gilt-edged market. For all the brave words about the authorities making more positive use of interest rates or manipulating interest rates, so long as securities are bought by investors as a voluntary act of investment, it is the purchaser and not the seller who is likely to set the terms in the final analysis.

The Treasury's adverse experience in maintaining a flow of securities into nonbank hands during periods of business expansion has recurred during the rapid economic upswing in Britain in 1959-1960. In his budget speech on April 4 (1960), Chancellor Amory spoke " of the difficult conditions we had to face in the gilt-edged market last year " and reported that " over the year as a whole we paid out more to the gilt-edged market than we were able to take in by new issues and official sales " (9). He was able to report that sales of nonmarketable securities had provided a sufficient cash inflow to finance the Treasury's capital spending needs during 1959-1960; he announced more attractive terms for these securities in an effort to maintain the cash inflow during 1960-61. A few weeks later on April 28 the British authorities introduced the Special

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(9) *Parliamentary Debates* (Hansard), April 4, 1960, cols. 34 and 35. He spoke of the 1959-60 gilt-edged difficulties in these words:

" Unlike the previous year, we had no long periods of sustained demand for gilt-edged stocks, and we were only occasionally able to sell on any scale. Moreover, during the year no less than £950 million of Government stock matured for redemption, and in the course of our operations there was a certain amount of what the Americans call ' attrition '; in other words, some holders of Government maturing stock did not take other Government securities in place of their holdings, and had to be repaid in cash. The market also needed a good deal of help from the authorities to absorb the heavy sales of securities by the banks throughout the year ".

Deposits scheme (10) as a supplementary credit-control device and also reintroduced minimum downpayment regulations on purchases of consumer durable goods.

Can interest rates control liquidity?

The problem, therefore, is not merely a matter of price expectations but the perverse elasticity in credit supplies in Britain under present arrangements during periods of business expansion (though not in periods of recession). Large annual debt maturities and the way the Exchequer in Britain finances its current capital needs assist the private sector to shift the impact of credit shortages onto the Treasury. Britain's experience seems to suggest that there are at least three reasons why interest rates cannot be depended upon to control the liquidity of a booming economy.

In the first place, interest rates can " lock in " the investor only to the extent that the market price is lower than the purchase price of the security. How much loss he will accept depends upon the investor's need for funds or his profit expectations. In periods when the prospective gains are attractive, he may be willing to take a substantial capital loss.

If investors are to be " locked in " over time, current interest rates must move continuously to higher levels. This means that long-term rates would either have to be quite flexible over the cycle (a policy which would create substantial difficulties in other respects, as the Committee rightly point out, pages 174 ff.) or would have to go continuously from one level to an even higher one. Should interest rates rise as much in the next ten years as they have in the past decade, interest rates in the Western countries would be high indeed.

In the second place, maturing debt provides the private sector with a fool-proof means of obtaining cash. Both bank and nonbank holders of maturing securities have what might be called a " free cash option " in that they can obtain cash without capital loss simply by refusing to renew their securities. With annual bond maturities of between £600 and £1,000 million in Britain (together with a

(10) The Special Deposits scheme is discussed in detail in " The New Monetary Weapon ", *The Banker* (London), August 1958, pages 493 to 506. See also *Memoranda of Evidence*, Vol. I, pp. 38-42.

large volume of floating debt), it is difficult to see how lenders and borrowers can be locked in by declining bond prices.

In the third place, it is difficult to see how, under British practices, liquidity can be controlled through interest rates during periods when the private sector is failing to increase its security holdings. For the Exchequer merely absorbs its new securities into official portfolios and raises cash for its capital spending from official or banking sources. The British arrangements are unique in that the Exchequer is always assured of its cash needs, often without substantial cost effect. These arrangements help to explain how in the United Kingdom between 1955 and 1957 the cost of credit was kept high but there was no corresponding cut in its availability. In the words of a London clearing bank chairman, " dear money and scarce money are not the same thing " (11).

The fact that credit was dear but not scarce may explain why members of the Committee found such limited evidence of the effectiveness of monetary restraint. In their words, " The conclusion we draw from the evidence is that the main effect of the restriction of bank credit was to drive frustrated borrowers to other sources of credit, where borrowing was more expensive and sometimes more onerous in other ways " (p. 162). They could not find evidence of an effective cutback in the availability of credit, even though interest rates were pushed to high levels. They were not " able to find that the squeeze had any marked effect on holdings of stocks of commodities. There was no sign that consumer spending was forced down... On the industrial side, the banks on the whole managed to avoid positive reductions of existing advances, though they had to be discouraging to applications for new advances " (pp. 162-3). In these circumstances, it is hardly surprising that they came to be impressed with the " limitations (of monetary policy) which can neither be ignored nor avoided " (p. 336).

Despite the liquidity-control difficulties growing out of debt financing needs, the members of the Committee did not regard the continuous growth in public debt, needed to finance public capital spending, as a problem. For example, they rejected Sir Roy Harrod's plea for a change in policy. He had attached great importance to the Treasury's role as a substantial peacetime borrower and had

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(11) Speech of A. W. Tuke, Chairman, Barclays Bank, in *The Economist* (London), January 21, 1956, page 246.

urged " removal of this burden by radical changes in the price and capital requirements of the nationalized industries " (p. 210). They concluded that this solution was not realistic, not on banking grounds, but because the nationalized industries as a whole are " getting no net return on capital employed " and have very little scope to raise prices (p. 219). They also rejected the possibility of increased taxation where " the Budget deficit is being used in effect to finance additions to the productive equipment of economy " (p 207) as though the short-run inflationary impact of an investment were in any way related to its productivity; and they positively affirmed the desirability of continuing to borrow on the gilt-edged market. In addition, the Committee recommended that the borrowing needs of the local authorities, which in 1955 had been shifted to the capital market, be placed once again onto the Exchequer through the Public Works Loan Board (12). These recommendations mean that the Exchequer would have to find very substantial sums of cash, year after year, for these two groups from the gilt-edged market.

Private liquidity and a growing public debt

The ease with which the private sector was able between 1955 and 1957 to frustrate attempts to reduce its credit availabilities illustrate some of the consequences of continuous Exchequer cash needs and of a substantial floating supply of Treasury securities in private hands. It may no longer be sufficient for economists to continue with the comfortable views, inherited from the era of the thirties with its idle resources and need for deficit financing, that the size of the public debt does not matter since we only owe it to ourselves or to assume that an economy can accommodate any volume of debt. The Radcliffe *Report* itself shows that Britain's public debt burden is relatively less today than it was before 1939; it was equivalent to 204 per cent of national income in 1935 and to only 168 per cent in 1958 (p. 193). Yet today Treasury fiscal policies are dominated by debt-management objectives, which was hardly the case in 1935. Furthermore, it may not be accidental that the world's strongest currency at the moment, the D-mark, comes from a country

(12) The British Treasury specifically rejected this recommendation. See *Parliamentary Debates* (Hansard), November 26, 1959, cols. 583 to 587.

which absorbed the wartime currency excess through a conversion and has neither debt maturity nor Treasury capital spending financing problems to beset the authorities nor a wide private holding of Treasury securities to be drawn on for liquidity purposes.

By historical standards, the size of the public debt in the United Kingdom is very much larger than, and the liquidity needs of the private sector probably far below, the level prevalent in earlier times when recurring depressions and private liquidity crises were the common experience, not continuous employment and rising prices. It has been estimated that Government debt now accounts for over half the net worth of the private sector in Britain (13). For the private investor, a greatly diversified range of nongovernmental investment instruments now competes as an outlet for his funds with government securities; as a result, there is no longer as clear grounds for a strong preference for Treasury securities with their freedom from credit risk or greater marketability (14), especially under the post-1945 conditions of expanding output and income. For the business man, investment decisions can now relate not to credit availabilities but to prospective funds obtained "by receipt of income (for instance from sales), by disposal of capital assets or by borrowing" (p. 133). Stable markets and rising prices enable the firm to plan its expansion on the basis of current receipts and on the basis of anticipated income as well (15). On the other hand, an expanded public debt, the outgrowth first of depression policies, then of war finance and finally of postwar capital spending, has provided the British private sector with a widely-held source of liquidity. It was the Exchequer's need to meet both the debt and its current spending needs that created such credit control difficulties for the authorities.

It is in the analysis of how the private sector can shift Treasury securities for liquidity purposes that the great error of the Radcliffe Committee in attempting to discard the concept of money supply becomes apparent. After all, a Treasury security has no capacity in

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(13) E. Victor Morgan, "What Role for Interest Rates", *The Banker*, October 1959, page 587.

(14) *Treasury-Federal Reserve Study of the Government Securities Market*, Part I (Washington: 1959), page 5.

(15) In the United States, though not in the United Kingdom, even bank loans (in the form of term, consumer and real estate loans) are now chiefly on the basis of the anticipated income of borrowers; commercial banks no longer concentrate on loans for short periods and of a self-liquidating character. See, for example, Herbert N. Prochnow, "Bank Liquidity and the New Doctrine of Anticipated Income", *Journal of Finance*, December 1949, page 208.

itself to add to current spending; it must first be converted into a bank deposit. This shift from an older to a new investment is a two-stage process: (a) disentagling (16) the original investment by converting it into cash; and (b) employing the cash to buy the new asset. The second step is clearly automatic; it is therefore essential to concentrate upon the first step in attempting to limit private investment switching during periods of business expansion.

The function of limiting such shifts between financial assets and money has always been the major responsibility of the rate of interest. For interest rates set the terms upon which the investor obtains cash from an old financial asset. Rising bond yields during a boom help to check such disentanglings because the increasing capital losses on the old securities reduce the net attractiveness of any new investment opportunity. Since the stock of financial assets so greatly exceeds the money supply at any time, the flow from securities to cash must be kept in hand, especially as the expansion gathers momentum.

In the process, what happens to the money supply is much more significant than what happens to interest rates (17). If the monetary authorities allow the money supply to grow in the same volume as securities are sold, the sales would have no effect on interest rates nor would bond prices necessarily decline. Under these conditions of virtual bond pegging, such shifts would be expected to continue, and probably to accelerate, as investment opportunities expand during the upswing. Yet at some point these sales must be slowed down, as fuller resource utilization materializes, and bond prices must be allowed to decline.

If the monetary authorities keep the money supply unchanged, these security sales produce lower bond prices and raise interest rates. No security could be turned into cash unless another deposit holder

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(16) This term was introduced in a somewhat different context by Professor D. H. Robertson (see *Essays in Monetary Theory*, Staples Press, London: 1940, page 13). I am indebted to Dr. Ronald F. Henderson, Corpus Christi, Cambridge for suggesting it.

(17) The contrary opinion was presented to the Radcliffe Committee by Professor R. F. Kahn in these words: "It is inherent in this view that the rates of interest should look after themselves, and that the quantity of money is what matters. My answer is that it is the rates of interest that matter interpreted in a wide sense, and not the quantity of money". (*Minutes of Evidence*, question 10986). Professor Kahn's evidence apparently impressed the Committee since the *Report* states: "We therefore follow Professor Kahn, in the evidence which he submitted to us, in insisting upon the structure of interest rates rather than some notion of the 'supply of money' as the centre-piece of monetary action" (page 134).

agreed to purchase it. In this process, the check to the *total liquidity* of the private sector (not the liquidity of the security holder) would be absolute, aside from velocity effects; a flow from securities into deposits would be matched by a counterflow from deposits into securities. In the British case, the purpose of security sales is to avoid Exchequer borrowings from the banking system; in this direct sense, liquidity control, as it is called by the Committee, amounts to no more than a control of bank deposit creation, in other words the money supply. Only by selling securities can the British authorities hope to stabilize the liquidity of the private sector; but the funding policy has proved to be a fair-weather instrument precisely because it has not been possible to impose an effective credit squeeze on the private sector without controlling the Exchequer's demands on the banking system, that is, on the money supply. When the members of the Committee say, "We find control of the money supply to be no more than an important facet of debt management", they could as well have said that debt management was merely a means of controlling the money supply.

The overwhelming fault of a policy of limiting the money supply, in the eyes of cheap-money advocates, is that interest rates would move ever upward as demand pressure mounted. By reducing its security holdings, the private sector in Britain can evade credit restraint, as it did between 1955 and 1957. Because of its annual maturities and its new capital needs, the Treasury is then forced, as the largest borower in the market, to pay marginal rates competitive with private borrowers; these rates for short- and long-term money can be high, as was demonstrated in the United Kingdom in the fall of 1957 and in Canada in the summer of 1959.

The Treasury can reduce this burden of credit restraint to the extent that its cash needs are eliminated and its annual maturities reduced. The compensatory fiscal policies of the thirties, redefined to encompass the Treasury's total cash needs and not merely its current spending, would have the effect of cushioning the rise in interest rates and the growth of private liquidity during boom periods. Surplus tax receipts allow the Treasury to retire existing debt; the debt repayments increase the funds in capital markets.

Our current problem of economic stabilization over the kinds of business cycles we have experienced in the postwar period is to keep the wide fluctuations in private investment from creating excess total demand pressures from time to time. In Britain, it is a matter

of reconciling fluctuating private spending with continuously expanding public investment. Because of debt-management problems, the British authorities were forced to resort to a variety of special monetary and fiscal measures between 1955 and 1957 in their attempts to keep demand in the private sector under control. In April 1960, they also introduced special credit-control measures to check the 1959-60 business expansion. During the business expansion in 1955-1957 and during earlier postwar years, the British experience has been that public investment had eventually to be cut back substantially, often in the midst of a foreign-exchange crisis. The Committee's view was that such action was "a confession of failure: it may entail wasteful disruption of plans, as when investment in the public sector was cut for this kind of reason in 1957" (p. 207).

Is it not time for all of us — economists, political leaders and the public — to recognize that the only cheap money the Treasury can (and should be expected to) depend upon is tax money? Tax receipts carry no interest burden, create no maturity problems and cannot become a source of cash for the private sector. Many cheap-money advocates who propose added credit creation to accelerate growth in our Western economies seem to forget that the Russian fiscal system depends upon high turnover taxes to curtail consumption and free resources for expanding government investment. A policy of high yields is only second best because it creates debt handling problems for the authorities and provides the private sector with a floating mass of liquidity which immensely complicates monetary and fiscal management during booms. Yet acceptance by the Treasury of high rates on its securities is unquestionably a step in the right direction. The Committee's recommendation on rates is in fact the line of policy now accepted in Britain by policy-makers and by the public. For all its limitations, and they are considerable, the distinctive contribution of the Radcliffe *Report* and its principal claim to be a distinguished monetary document and a guide to policy-making may well prove to rest on the Committee's unqualified assertion that high rates on securities "will probably in the long run be the easiest on the taxpayer, despite the superficial appearance of a high interest charge on the debt" (p. 213).

Washington SAMUEL I. KATZ

The Structure of the Italian Stock Market

An article published in an earlier issue of this journal dealt with post-war developments in the Italian equity market. Now we propose to discuss its structure, in terms of the composition of the stock exchange list and of a brief review of the most representative items in it.

The first thing that hits the eye of the observer is how short the lists of Italian Stock Exchanges are in comparison with those of other Western countries. Several thousand equity shares are quoted on the London stock exchange, 2,000 on the New York stock exchange alone and in Paris, and very nearly a thousand in Frankfurt and Brussels; but on the Milan stock exchange, Italy's largest, only 137 shares are quoted, and on all Italian stock exchanges together barely 220 (without duplications, of course).

There are in Italy altogether ten stock exchanges (Table 1), but the volume of business is very unevenly distributed among them. The Milan stock market is far and away the most important, with about 60 per cent of total business; next in order, but a long way behind, are Turin and Rome, with 14 and 13 per cent of total business, respectively, and then Genoa, with 8 per cent. These four stock exchanges between them account for 94 per cent of all Italian business in equity shares. In 1959, total turnover in all stock markets together amounted to some 900 billion lire, which was more than three times as much as in 1958, but still fell short of the 1955 record figure of 968 billion lire. This is about as much as is traded on the New York stock exchange in a week.

These brief preliminary remarks may serve to show how the size of the Italian equity market compares with major European and American markets. There is clearly much room for expansion, and it is to be hoped that our country will make use of its opportunities in this respect, so as not to find itself at a disadvantage when progressive European integration and diminishing world tension in time allow of freer international capital movements.

TABLE 1

ITALIAN STOCK EXCHANGES AND VOLUME OF BUSINESS

Stock exchange	Number of shares quoted	Volume of business		
		Number of shares traded (*millions*)	Value of transactions	
			(*billion lire*)	(*per cent*)
Bologna	11	2.5	4.1	0.4
Florence	38	16.9	27.6	3.1
Genoa	74	44.9	73.3	8.2
Milan	137	322.5	525.5	58.4
Naples	32	11.0	17.9	2.0
Palermo	15	0.1	0.2	—
Rome	79	73.0	119.0	13.2
Turin	79	78.3	127.0	14.1
Trieste	26	1.4	2.3	0.3
Venice	16	1.4	2.3	0.3
Total 1959	220	552.0	899.2	100.0
Total 1958	220	206.9	259.7	—

Financial groups on Italian stock markets

Table 2 presents a synthetic picture of the largest industrial and financial holding companies and of the total capital under their control. These companies and their subsidiaries together account for a large part of Italian industry, as well as for the bulk of the more important shares with stock exchange quotations.

Part A of the Table lists the five large financial companies of the *Iri* group, part B private purely financial companies, and part C the major industrial holding companies — that is, companies whose main activities are industrial but which also control many affiliates. All these companies except *Finmeccanica* are quoted on the stock exchange. *Finmeccanica* was included partly to give a complete picture of the *Iri* group, and partly because some of the company's more important subsidiaries, as will be seen, have their own stock exchange quotations.

The financial companies of the *Iri* group are true holding companies in that practically all their interests in other companies are controlling ones. The same is true of the companies listed under C, while those listed under B are less homogeneous. The first two of the latter, *Gim* and *Industrie Agricole*, are to all intents and purposes financial holding companies,

TABLE 2

PRINCIPAL FINANCE GROUPS ON ITALIAN STOCK MARKETS

(figures in million lire)

Company	Capital stock	Investment holdings (book value)		Capital stock of companies controlled directly or indirectly
		controlling interests	minority holdings	
A - *IRI Group*				
Finelettrica	45,000	51,851 *		145,886
Finmare	18,000	956 *		1,100
Finsider	70,686	79,691 *		163,126
Finmeccanica	50,000	25,490 *		53,833
STET	140,000	133,341 *		152,860
	323,686	291,329		516,805
B - *Financial companies*				
GIM	4,000	5,850 *		7,680
Industrie Agricole	6,885	13,351 *		41,258
La Centrale	42,000	44,000	11,000	106,170
Bastogi	42,000	18,921	35,452	63,186
Pirelli & C.	6,000	2,473	4,725	40,415
Sviluppo	12,500	3,011	8,112	8,560
INVEST	15,000	—	12,668	—
	128,385	87,606	71,957	267,269
C - *Industrial groups*				
Edison	200,000	190,362 *		358,446
Montecatini	100,000	50,762 *		51,729
FIAT	100,000	56,819 *		...
SNIA-Viscosa	27,450	25,154 *		...
Italcementi	12,000	11,276 *		...
SADE	72,000	20,530 *		23,072
Italgas	23,880	10,704 *		...
	535,330	365,606 *		433,247
Grand total	987,401	744,541	71,957	1,217,321

* Mainly controlling interests.

the great bulk of their interests being in companies under their control. The next four, *La Centrale*, *Bastogi*, *Pirelli & C.*, and *Sviluppo*, have controlling interests in some important affiliates, but also minority interests in other companies, so that they are a blend of financial holdings and investments companies. The last company listed under B, *Invest*, is a pure investment company, indeed a proper investment trust of the closed end type and the only one of its kind in Italy.

The capital stock of the holding and industrial companies with stock exchange quotations and the capital stock of the companies they control add up to 2,200 billion lire, or 48 per cent of the capital stock of all Italian joint stock companies together. However, these are gross figures which, from an economic point of view, contain a lot of duplications. The percentage would turn out to be much lower if it were possible to calculate it on capital net of duplications, that is to say, on capital in a physical sense.

Let us now look in more detail at the composition of the various financial companies and groups listed in Table 2, with particular reference to those of their affiliates which have stock exchange quotations.

The IRI Group

The Institute for Industrial Reconstruction (*Istituto per la Ricostruzione Industriale - Iri*) is an institution under public law (or in plain words, a government agency) set up in 1933 to relieve some of the largest Italian banks of the stock holdings frozen in their portfolios. The complex operations of *Iri* ended up with the *de facto* nationalization not only of the then existing biggest commercial banks, but also of large parts of heavy industry and of important public utilities and engineering concerns. After *Iri*'s intervention however, all the companies concerned continued to operate as normal joint stock companies and as such remained subject to ordinary company law. This was the origin of the so-called "mixed" companies, which are in fact controlled by the government, through *Iri*, but are, legally, ordinary joint stock companies with minority holdings in private hands. Many of them are quoted on the stock exchange. Subsequently, *Iri*'s activities went on expanding, mostly within the institutional framework of public utilities and heavy industry, until today the companies of the *Iri* group constitute a by no means negligible part of the whole of Italian industry. In terms of the capital stock of companies quoted on the stock exchange, the *Iri* group accounts for no less than one-third of the total (see Table 3).

TABLE 3

STOCK EXCHANGE LIST OF « MIXED » COMPANIES UNDER THE DIRECT OR INDIRECT CONTROL OF IRI

Company	Capital stock (*million lire*)	Direct IRI holdings	Indirect IRI holdings	Total IRI holdings
		(*per cent of capital stock*)		
1. Società Finanziaria Elettrica (Finelettrica) . .	45,000	79.0	—	79.0
1.1 Soc. Idroelettrica Piemonte (SIP)	103,423	15.7	31.5	47.2
— PCE	7,956	—	51 +	51 +
— Vizzola	42,230	—	51 +	51 +
1.2 Soc. Meridionale di Elettricità (SME) . .	94,978	15.2	23.8	39.0
— UNES	18,800	—	51 +	51 +
— Elettr. Campania	7,133	—	51 +	51 +
— Elettr. Calabria	3,525	—	51 +	51 +
— Pugliese	9,334	—	51 +	51 +
— Lucana	1,745	—	51 +	51 +
— Napoletana Gas	2,400	—	51 +	51 +
2. Società Finanziaria Marittima (Finmare) . .	18,000	96.6	—	96.6
3. Società Finanziaria Siderurgica (Finsider) . .	70,686	62.0	—	62.0
3.1 Cornigliano	50,000	29.9	65.8	95.7
3.2 ILVA	44,000	0.4	64.8	65.2
3.3 Dalmine	12,000	0.2	51.0	51.2
3.4 Terni	33,250	7.4	51.2	58.6
3.5 Cementir	5,000	12.0	51.0	63.0
4. STET - Soc. Fin. Telefonica	140,000	66.6	—	66.6
4.1 TETI	30,000	—	82.0	82.0
4.2 SIT	1,000	—	60.0	60.0
5. Strade Ferrate Secondarie Meridionali . . .	1,200	55.5	—	55.5
6. Manifatture Cotoniere Meridionali	6,000	45.0	—	45.0
7. Monte Amiata	3,280	32.6	—	32.6
8. Mediobanca	8,000	—	51.0 +	51.0 +
9. Ansaldo	10,800	40.5	51.0 +	91.5
10. Cantieri Riuniti Adriatico	3,000	21.9	51.0 +	72.9

+ Absolute IRI majority, percentage unknown.

Iri exercises its control either through the five large holding companies listed in Table 2 — which themselves are mixed companies and therefore in part privately owned and quoted on the stock exchange — or directly in the case of a number of firms which are in no way connected with any of these five holding companies. In some cases there is a mixture of direct and indirect control, in so far as *Iri* itself may hold blocks of shares of firms controlled by one of its holding companies. This kind of split control has, of course, no practical significance, but it obscures the formal relationships within the group and might perhaps better be done without. In most cases *Iri* possesses, directly or indirectly, an absolute majority in the controlled companies, but in some cases, which will be mentioned later, *Iri* exercises its control with only a large minority holding.

Table 3 contains a complete list of all the companies of the *Iri* group which are quoted on the stock exchange, together with an indication of the internal investment situation.

The *Società Finanziaria Elettrica* (*Finelettrica*) represents *Iri* interests in the electricity sector. It directly controls *Società Idroelettrica Piemonte* (*Sip*) and *Società Meridionale di Elettricità* (*Sme*), both of which in turn are the mother companies of important groups of electricity generating and distributing firms. In both these companies *Iri*'s total holdings are less than 50 per cent, namely, 47.2 per cent in *Sip* and barely 39 per cent in *Sme*; nevertheless, *Iri's* control is undisputed even in the case of *Sme*, in which private financial groups have sizeable interests. This is possible because the remaining shares of both companies are widely distributed among the investing public at large.

From the investor's point of view, *Finelettrica* is a good stock with a safe return but no immediate growth potential. We have collected particulars of the company's position and results for the last three years in a synthetic table of a form which we have found convenient and useful and which we shall use subsequently in other cases. The item "net worth" includes the year's profits.

The book value of the shares is not much in excess of their nominal value, but this understates the position, in so far as the company's investments are entered at well below their current market price. The actual composition and current value of *Finelettrica*'s investments on June 30, 1959, are shown in a separate table below, from which it will be seen that their market value at that time was almost twice as much as shown in the

FINELETTRICA

Statement of condition	(*billion lire*)		
	30/6/57	30/6/58	30/6/59
Investment holdings	40.2	43.6	51.9
less: long-term debt	—	—	—
	+ 40.2	+ 43.6	+ 51.9
Current claims	15.6	21.0	19.9
less: current liabilities	−21.8	−18.4	−22.0
	− 6.2	+ 2.6	− 2.1
Cash and bank	—	+ 3.6	+ 0.4
Net worth	34.0	49.8	50.2
of which: capital stock	30.0	45.0	45.0
Ratio of net worth to capital stock	1.13	1.11	1.116
Nominal value of share (*lire*)	1,000	1,000	1,000
Book value of share (*lire*)	1,130	1,100	1,115

Income data	Business year (*billion lire*)		
	1956/57	1957/58	1958/59
Gross receipts	4.3	4.7	5.1
Net profit	2.4	3.1	3.3
Dividends paid out	2.2	2.9	2.9
Dividend per share (*lire*)	75	75	75

accounts. On this basis, *Finelettrica*'s own shares at that date should have been worth rather more than 2,000 lire, and were in fact quoted at around that level.

FINELETTRICA HOLDINGS ON JUNE 30, 1959

Shares	Number (*millions*)	Unit book value (*lire*)	Total book value (*billion lire*)	Unit market price (*lire*) June 30, 1959	Total market value (*billions lire*) June 30, 1959
SIP	27.2	965	26.2	1,875	52.8
SME	19.0	876	16.6	1,900	36.1
Terni	27.2	209	5.7	370	10.1
Other not quoted	..	..	3.3		
Total			51.8		99.1

Gross receipts consist largely of dividends on the company's equity holdings. During the last two years profits represented more than 65 per cent of gross receipts and dividends absorbed about 90 per cent of profits. However, it should be noted in this context that owing to certain imperfections in Italian company law, the profits and loss accounts leave much to be desired and their figures cannot be trusted entirely. It will be seen, for instance, in this and in other cases subsequently illustrated, that net profit is hardly ever shown as much higher than dividend distribution, even when dividends have remained constant for some years — although it is well known that profits fluctuate with the ups and downs of general economic conditions, given the greater rigidity of costs. Although we shall continue, in the subsequent analysis, to quote the figures for profits and dividend distribution, we would warn the reader not to rely too much on their accuracy.

The *Società Idroelettrica Piemonte* (*Sip*) produces electricity and distributes it in Piedmont and adjacent areas. It is one of the largest Italian electricity companies; its 41 hydroelectric power stations have a combined capacity of 4,700 million Kwh, and it also owns a few thermal power stations with a combined capacity of 1,000 million Kwh. As will be seen from the company's particulars as set out in the accompanying table, plant is written off by about 35 per cent, investments cover a good part of outstanding bonds, and current claims largely exceed current liabilities.

The dividend on *Sip* shares has been held constant at 84 lire for ten years, while the capital has more than tripled, in part by bonus issues. This, together with the group's overall position, makes *Sip* one of the blue chips of the Italian stock market.

Of *Sip*'s many subsidiaries, *Vizzola* and *Piemonte Centrale di Elettricità* have their own stock exchange quotations. *Sip* also has interests in both the electronuclear companies set up lately in Italy, namely *Senn* (*Società Elettronucleare Nazionale*) of the *Iri-Eni* group, and the private *Selni* (*Società Elettronucleare Italiana*).

The *Società Meridionale di Elettricità* (*Sme*) heads an important group of electricity companies which have practically a monopoly of electricity production and distribution in the whole of Central and Southern Italy (from the Abruzzi to Calabria, but not in the Islands). *Sme* itself owns ten hydroelectric power stations with an installed capacity of 700,000 Kw and one thermal power station at Naples with an installed capacity of 220,000 Kw. The principal subsidiaries of *Sme*, as listed in Table 3, are

SIP

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	182.4	198.3	207.8	214.1
less: depreciation	54.5	60.9	67.1	73.6
	+ 127.9	+ 137.4	+ 140.7	+ 140.5
Inventories	2.9	1.1	0.7	3.4
Investment holdings	26.3	28.1	33.8	34.2
less: long-term debt	48.6	52.1	50.6	48.6
	- 22.3	- 24.0	- 16.8	- 14.4
Current claims	18.7	24.7	17.4	28.2
less: current liabilities	21.4	19.1	21.9	13.6
	- 2.7	+ 5.6	- 4.5	+ 14.6
Cash and bank	+ 0.1	+ 0.1	+ 0.1	+ 0.1
Net worth	105.9	120.2	120.2	144.2
of which: capital stock	68.9	82.7	82.7	103.4
Ratio of net worth to capital stock	1.54	1.45	1.45	1.39
Nominal value of share (*lire*)	1,200	1,200	1,200	1,200
Book value of share (*lire*)	1,850	1,740	1,740	1,670

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales	22.0	25.8	27.6	26.9
Net profit	4.9	5.9	5.9	6.8
Dividends paid out	4.6	5.6	5.5	6.8
Dividend per share (*lire*)	84	84	84	84

quoted on the stock exchange, but *Sme* also controls a good many other smaller companies and has an interest in nuclear power through *Senn*. The company's accounts have a certain resemblance with those of *Sip*.

From the investor's point of view, *Sme* is one of Italy's leading stocks and, being quoted on Swiss stock exchanges, also enjoys a certain international reputation. Major stockholders include *Bastogi* with 13.7 per cent and *Financière Italo-Suisse* with 4.8 per cent of the stock; the rest of the shares are widely distributed among private investors. The dividend is 75 lire per share and has not changed since 1951.

SME

Statement of condition	31/3/57	31/3/58	31/12/58	31/12/59
Fixed assets	167.9	175.2	183.8	193.1
less: depreciation	48.7	53.7	57.5	63.8
	+ 119.2	+ 121.5	+ 126.3	+ 129.3
Inventories	+ 2.5	+ 2.4	+ 2.2	+ 2.1
Investment holdings	24.8	25.7	25.2	25.0
less: long-term debt	36.0	35.3	38.0	41.5
	- 11.2	- 9.6	- 12.8	- 16.5
Current claims	21.8	23.8	19.0	28.1
less: current liabilities	22.8	27.8	24.4	16.7
	- 1.0	- 4.0	- 5.4	+ 11.4
Cash and bank	+ 1.0	+ 0.6	+ 0.6	+ 3.2
Net worth	110,5	110.9	110.9	129.5
of which: capital stock	75.0	75.0	75.0	95.0
Ratio of net worth to capital stock	1.47	1.48	1.48	1.36
Nominal value of share (*lire*)	1,000	1,000	1,000	1,000
Book value of share (*lire*)	1,475	1,480	1,480	1,360

Income data	Business year (*billion lire*)			
	1956/57	1957/58	1958 (*)	1959
Sales	22.4	23.0	22.3 (*)	22.4
Net profit	5.2	5.6	5.9 (*)	6.8
Dividends paid out	4.9	5.3	5.7	6.4
Dividend per share (*lire*)	75	75	75 (*)	75

(*) Nine-months results extrapolated for a full year.

The *Società Finanziaria Marittima* (*Finmare*) represents *Iri*'s shipping interests. It is almost wholly (96.6 per cent) owned by *Iri* and in its turn owns almost the entire stock of the four shipping companies under its control. These are the *Società "Italia"*, which runs the big transatlantic lines to North and South America, the *Lloyd Triestino*, which operates the Suez Canal lines to Africa, Asia and Australia, and the two smaller companies *Adriatica* and *Tirrenia*, which concentrate on Mediterranean shipping. These companies are not quoted on the stock exchange and the market for *Finmare* itself is somewhat narrow.

The *Società Finanziaria Siderurgica* (*Finsider*) is the holding company for *Iri*'s interests in heavy industry. *Iri* owns 62 per cent of the stock of this company, which has absolute majority holdings in a number of important firms, including: the two big steel concerns *Cornigliano* and *Ilva*, *Dalmine* (mainly tube-makers), *Terni* (heavy machinery and elec-

FINSIDER

Statement of condition	(*billion lire*)		
	30/4/57	30/4/58	30/4/59
Investment holdings	57.4	77.5	79.4
less: long-term debt	0.3	0.3	0.4
	+ 57.1	+ 77.2	+ 79.0
Current claims	11.0	22.9	27.3
less: current liabilities	9.3	19.0	24.4
	+ 1.7	+ 3.9	+ 2.9
Cash and bank	+ 0.2	—	—
Net worth	59.0	81.1	81.9
of which: capital stock	50.5	70.7	70.7
Ratio of net worth to capital stock	1.17	1.147	1.158
Nominal value of share (*lire*)	500	500	500
Book value of share (*lire*)	500	575	580

Income data	Business year (*billion lire*)		
	1956/57	1957/58	1958/59
Gross receipts	7.9	6.5	8.4
Net profit	3.8	4.8	6.5
Dividends paid out	3.2	4.5	6.1
Dividend per share (*lire*)	45	45	45

tricity), *Cementir* (cement), as well as in many smaller firms not quoted on the stock exchange. In this group, *Finsider*, *Ilva* and *Terni* have the widest market.

The book value of *Finsider* shares is just under 580 lire, whereas their current market price is much higher. One of the reasons for the

discrepancy is that the company's investment portfolio is greatly undervalued in the books, as is seen from the table below:

FINSIDER HOLDINGS ON APRIL 30, 1959

Shares	Number (*millions*)	Book value	Market value as of Dec. 31, 1959
		(*billion lire*)	
ILVA	71.3	19.7	65.0
Terni	41.1	9.4	20.0
Dalmine	12.2	5.8	32.0
Cornigliano	32.9	31.6	59.0
Cementir	6.4	2.1	5.0
Others not quoted	—	10.8	—
Total		79.4	191.8

The market value of *Finsider* investments at the end of December, 1959, was 140 per cent higher than their accounting value, and has further increased since then. There is then the rather high dividend of 45 lire, which still makes *Finsider* one of the best yielding shares on the market and finally the very good results in the Italian steel industry in 1959 and the first months of 1960.

Ilva - Altiforni e acciaierie d'Italia, is one of the two biggest iron and steel concerns in Italy. The other is *Cornigliano*, which, however, introduced its stock on the market only last year.

Ilva has three smelting works, at Bagnoli (Naples), Piombino and Trieste, respectively, and fifteen processing and engineering works. It employs 22,000 people and its annual output runs to about 1.9 million tons of pig iron, 2 million tons of steel and 1.6 million tons of rolled sections.

The company's reserves amount to more than half its capital stock. Recently, however, the capital has been increased to 66 billion lire, half for new money and half as a bonus issue and the surplus has fallen to 20 per cent. The figures show a sharp drop in sales during 1958, but the brisk recovery in the second half of 1959, which was particularly marked in the Italian steel industry has brought an improvement in 1959 and

ILVA

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	103.1	116.7	135.5	151.6
less: depreciation	59.2	65.4	68.7	74.2
	+ 43.9	+ 51.3	+ 66.8	+ 77.4
Inventories	+ 23.8	+ 40.0	+ 42.5	+ 37.1
Investment holdings	0.9	1.1	1.5	4.8
less: long-term debt	31.7	36.2	48.8	–61.0
	— 30.8	— 35.1	— 47.3	— 56.2
Current claims	25.9	26.6	27.0	32.4
less: current liabilities	16.1	19.2	20.9	20.4
	+ 9.8	+ 7.4	+ 6.1	+ 12.0
Cash and bank	+ 8.2	+ 1.1	+ 0.1	+ 0.1
Net worth	54.9	64.7	68.2	70.4
of which: capital stock	32.0	44.0	44.0	44.0
Ratio of net worth to capital stock	1.72	1.47	1.55	1.60
Nominal value of share (*lire*)	400	3.0	400	400
Book value of share (*lire*)	685	2.8	620	640

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales	107.8	118.7	101.3	105.0
Net profit	2.7	3.0	3.3	3.3
Dividends paid out	2.7	2.8	3.1	3.1
Dividend per share (*lire*) (unchanged since 1953)	28	28	28	28

must have established new records in the company's order books. Discounting this, the price of *Ilva* shares has gone recently well above its book value.

Terni - Società per l'industria e l'elettricità, is one of the largest industrial concerns in Central and Southern Italy. Its activities have a wide range — apart from owning fourteen hydroelectric power stations, it operates huge steel works at Terni with specialized foundries for heavy machinery, two electrochemical factories (for the production of calcium

TERNI

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	143.3	153.4	162.5	171.0
less: depreciation	33.8	37.8	42.3	49.7
	+ 109.5	+ 115.6	+ 120.2	+ 121.3
Inventories	+ 8.7	+ 11.9	+ 10.4	+ 8.1
Investment holdings	2.3	2.2	4.6	5.5
less: long-term debt	- 32.5	- 32.8	- 36.9	- 35.1
	- 30.2	- 30.6	- 32.3	- 29.6
Current claims	28.0	28.6	23.2	24.2
less: current liabilities	54.1	53.2	48.1	- 50.5
	- 26.1	- 24.6	- 24.9	- 26.3
Cash and bank	+ 0.1	—	—	0.1
Net worth	62.0	72.3	73.4	73.6
of which: capital stock	26.2	33.2	33.2	33.2
Ratio of net worth to capital stock	2.37	2.18	2.21	2.22
Nominal value of share (*lire*)	250	250	250	250
Book value of share (*lire*)	590	545	552	555

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales	40.7	43.2	44.4	...
Net profit	1.9	2.1	2.3	2.3
Dividends paid out	1.8	2.0	2.2	2.4
Dividend per share (*lire*) (since 1956)	16.50	16.50	16.50	16.5

carbide, calcium cyanamide, ammonia, sulphuric acid, etc.), a cement mill and a few brown coal mines.

Terni has experienced some difficulties in recent years, as for one reason or another not all its activities always paid their way. The company has ample reserves, but also large debts. There has been, however, some improvement lately, and when the reorganization which, like all *Iri* companies, *Terni* is now undergoing yields its fruits, the company's stock ought to become more attractive.

The *Società Finanziaria Telefonica* (*Stet*), of whose capital *Iri* owns 66 per cent, controls the entire Italian telephone network through five affiliated companies. Of these, four are wholly owned by *Stet* and are not quoted on the stock exchange; the fifth, *Teti*, which is the telephone

STET

Statement of condition	(*billion lire*)		
	31/3/57	31/3/58	31/3/59
Investment holdings	73.1	85.2	133.3
less: long-term debt	5.8	5.9	5.4
	+ 67.2	+ 79.3	+ 127.9
Current claims	4.7	7.1	7.4
less: current liabilities	1.1	1.5	2.0
	+ 3.6	+ 5.6	+ 5.4
Cash and bank	+ 3.3	+ 3.4	+ 8.9
Net worth	74.1	88.3	142.2
of which: capital stock	65.0	78.0	120.0
Ratio of net worth to capital stock	1.14	1.132	1.185
Nominal value of share (*lire*)	2,000	2,000	2,000
Book value of share (*lire*)	2,320	2,265	2,375

Income data	Business year (*billion lire*)		
	1656/57	1957/58	1958/59
Gross receipts	5.1	6.1	7.5
Net profit	4.2	5.2	6.3
Dividends paid out	3.3	4.9	5.9
Dividend per share (*lire*) (unchanged since 1948)	150	150	150

company for Latium (incl. Rome) and Tuscany, and in its turn controls the *Società Impianti Telefonici* (*Sit*), is government-owned to the extent of 82 per cent and is quoted on the stock exchange. *Stet* is counted among the Italian blue chips. The book value of the stock is well below its current market price, but this, however, does not appear unreasonable in the light of the steady return (the dividend of 150 lire per share has been maintained for more than ten years on continuously growing capital) and the still fairly good yield of the stock. In 1959 the company again increased its capital, which is now 140 billion lire.

The fifth and last of *Iri*'s financial holding companies, *Finmeccanica*, which represents government investment in engineering and shipbuilding, is not quoted on the stock exchange. Two of the biggest shipbuilding yards it controls, *Ansaldo* and *Cantieri Riuniti dell'Adriatico*, are quoted independently, but the stocks are friendless since they have paid no dividends for some years. *Finmeccanica* controls a very great number of firms, among which we may mention *Alfa Romeo*, the car makers (1).

Iri furthermore owns almost the entire capital stock of the three nation-wide banks *Banca Commerciale Italiana*, *Credito Italiano* and *Banco di Roma*. These in turn hold a majority in *Mediobanca*, the only banking share quoted on Italian stock exchanges.

Finally, *Iri* directly controls very many other firms, but only three of them are quoted on the stock exchange, namely, *Monte Amiata* (mercury mining and production), *Strade Ferrate Secondarie Meridionali* (a small company running a secondary railway line on the outskirts of Naples), and *Manifatture Cotoniere Meridionali*, a large Neapolitan textile firm labouring under severe and prolonged difficulties. In the first and third of these companies *Iri* has no absolute majority holding, but only a minority control.

Other "mixed" companies quoted on the stock exchange

To complete our catalogue of the "mixed" companies quoted on Italian stock markets, we have to mention: *Società Finanziaria E. Breda*, in which the government itself holds directly a majority; *Anic*, where the majority holdings belong to *Eni* (*Ente Nazionale Idrocarburi*); and *Larderello*, which is controlled by the National Railways.

E. Breda is a holding company which controls a number of firms in heavy engineering and electro-engineering. *Anic* is the only Italian oil company with a stock exchange quotation; while it used in the past to concentrate on oil refining, it has now ventured also into the chemical and petrochemical field. During the last few years it set up a factory at

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(1) Very recently a new financial company has been created in the *Iri* Group. This is *Fincantieri*, which will hold all *Iri*'s interests in the shipbuilding sector. It will take over therefore *Ansaldo* and *Cantieri Riuniti* from *Finmeccanica*.

Ravenna for the production of synthetic rubber and chemical fertilizers from methane gas, and is now on the point of building another like it at Gela, Sicily, where it will use the local oil. *Larderello* is mainly concerned with the exploitation of the natural energy and the chemical products of the borax spring vapours in certain areas of Tuscany.

Private Financial Companies

In parts B and C of Table 2, at the beginning, we have listed the major Italian financial companies and industrial holdings. Now in Table 4, the entire list of companies belonging to private financial or industrial groups and whose shares are quoted on the Stock Exchange is shown.

TABLE 4

COMPANIES BELONGING TO PRIVATE FINANCIAL OR INDUSTRIAL GROUPS QUOTED ON ITALIAN STOCK EXCHANGES

1. *GIM*
   - 1.1 Broggi Izar
   - 1.2 Metallurgica Italiana
   - 1.3 S.A.G.I.
2. *Industrie Agricole*
   - 2.1 Eridania
   - 2.2 Distillerie
3. *La Centrale*
   - 3.1 Selt Valdarno
   - 3.2 Romana Elettr.
   - 3.3 Invest
   - 3.4 SIFIR
4. *Bastogi*
   - 4.1 Elettrica Sarda
   - 4.2 SESO
   - 4.3 Beni Stabili
5. *Pirelli & C.*
   - 5.1 Pirelli S.p.A.
     - — Incet
     - — Linoleum
   - 5.2 Aedes
6. *Sviluppo*
   - 6.1 C.I.G.A.
7. *Edison*
   - 7.1 Mittel
     - — Nord Milano
   - 7.2 Châtillon
   - 7.3 Edisonvolta
   - 7.4 Idroelettrica Subalpina
   - 7.5 Dinamo
   - 7.6 Elettr. Bresciana
   - 7.7 Orobia
   - 7.8 Emiliana
   - 7.9 CIELI
   - 7.10 O.E.G.
8. *S.A.D.E.*
   - 8.1 Acqua Marcia
9. *Snia-Viscosa*
   - 9.1 Cotonif. Olcese
   - 9.2 Cascami Seta
10. *Italgas*
    - 10.1 Condotta Acqua Potabili
    - 10.2 Pibigas

We will first examine the financial companies and then the industrial groups.

Gim (*Società Generale Industrie Metallurgiche*) has its main interests in basic metals. This is a very good group of companies, but rather small in size and therefore not among the most popular in the stock exchange.

Industrie Agricole Ligure Lombarda is mainly interested in the food industry, where its two most important affiliates are *Eridania Zuccheri* and *Distillerie Italiane*.

Eridania is the leading sugar concern in Italy. It has 26 sugar refineries, mostly in Northern Italy, and is planning the construction of another large one in Sardinia, to process the local sugar beet. The com-

ERIDANIA

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	44.3	44.6	47.1	50.3
less: depreciation	32.2	33.2	34.4	36.3
	+ 12.1	+ 11.4	+ 12.7	+ 14.0
Inventories	+ 33.3	+ 13.1	+ 16.1	+ 25.8
Investment holdings	7.4	7.5	8.9	9.7
less: long-term debt	6.0	5.7	5.6	5.6
	+ 1.4	+ 1.8	+ 3.3	+ 4.4
Current claims	8.7	8.6	5.1	7.0
less: current liabilities	34.6	17.2	10.9	25.1
	- 25.9	- 10.6	- 5.8	- 18.1
Cash and bank	+ 1.5	+ 4.9	+ 3.1	- 3.9
Net worth	22.4	20.6	29.4	30.0
of which: capital stock	18.0	18.0	24.0	24.0
Ratio of net worth to capital stock	1.24	1.14	1.23	1.25
Nominal value of share (*lire*)	2,000	2,000	2,000	2,000
Book value of share (*lire*)	2,480	2,280	2,460	2,500

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales	43.1	75.6	60.0	...
Net profit	1.3	1.8	2.2	2.6
Dividends paid out	1.3	1.7	1.9	2.4
Dividend per share (*lire*)	200	200	200	200

bined capacity of all these factories is more than 250,000 tons of sugar per year. The company has excellent traditions and, on careful examination, its position will be seen to be extremely sound, despite the sugar industry's recent difficulties which have not yet entirely spent themselves. More than three-quarters of fixed assets are written off, but stocks and current liabilities, while not nearly as burdensome as at the end of 1956, are still heavy. Sales receipts appear surprisingly high in relatoin to profit,

LA CENTRALE

Investment holdings on Oct. 31, 1959 and market value of Dec. 31, 1959

Stock	Number of units (*thousands*)	Book value (*million lire*)	Stock market value Dec. 31, 1959 (*million lire*)
Selt-Valdarno	9.3	17.1	17.1
Romana Elettr.	9.5	17.3	17.3
Others		1.8	1.8
Total electricity		36.2	82.8
Sifir	3.9	4.0	11.0
Invest	0.8	1.9	3.6
Bastogi	0.25	0.2	0.8
STET	0.11	0.3	0.4
Others		2.0	2.0
Total finance		8.4	17.8
Montecatini	1.3	1.4	4.2
Pirelli	0.2	0.2	1.4
Incet	0.3	0.3	1.2
Cornigliano	1.5	1.5	2.7
Others		1.3	1.3
Total misc.		7.2	10.8
Grand total		51.8	111.4

but more than half of them represent the excise tax on sugar, which, as is known, in Italy is as high as 100 lire per kg.

La Centrale is a large financial company which controls a great number of subsidiaries in various sectors. Its largest interests are in elec-

tricity (70 per cent according to the latest accounts); the finance sector comes next (16.3%) and the remaining 13.7% are scattered in various other branches.

Until 1957 *La Centrale* also controlled one of the large telephone companies (*Società Telefonica Tirrena - Teti*), but this has since been natio-

LA CENTRALE

Statement of condition	(*billion lire*)		
	31/10/57	30/6/58	31/10/59
Investment holdings	51.4	46.0	57.3
less: long-term debt	2.7	2.7	5.0
	+ 48.7	+ 43.3	+ 52.3
Current claims	7.9	11.6	3.7
less: current liabilities	11.2	15.4	17.9
	- 3.3	- 3.8	- 14.2
Cash and bank	—	+ 7.8	+ 14.4
Net worth	45.4	47.3	52.5
of which: capital stock	35.0	35.0	42.0
Ratio of net worth to capital stock	1.30	1.35	1.25
Nominal value of share (*lire*)	5,000	5,000	5,000
Book value of share (*lire*)	6,500	6,750	6,250

Income data	Business year (*billion lire*)		
	1956/57	1957/58	1958/59(1)
Gross receipts	4.0	6.0(1)	9.0(2)
Net profit	2.8	4.6(1)	6.4(2)
Dividends paid out	2.5	2.8(1)	3.9(2)
Dividend per share (*lire*)	400	400(1)	500(2)

(1) For 8 Months.
(2) For 16 months.

nalized against due compensation, and now depends on *Iri* through *Stet*. *La Centrale* interests in the finance sector include controlling holdings in *Invest* (Italy's only investment trust), in *Cofina* (the only company in

Italy with investment "plans" for small savers on the instalment system), and in *Sifir* (and important newcomer among finance houses). The reason for the exceptionally high liquidity shown in the company's latest accounts is that not all the funds obtained from the compulsory sale of *Teti* have yet found adequate reemployment.

At current market prices of those of *La Centrale*'s investments which are quoted on the stock exchange, the company's holdings should be worth 120 per cent more than their book value of 52 billion lire. Details are given in a separate table above.

The *Società per le Strade Ferrate Meridionali*, known on the stock exchange as *Bastogi*, is one of the oldest of Italian financial companies. Its original business was the construction and operation of railway lines in

BASTOGI

Investment holdings on Dec. 31, 1958 and market value of Dec. 31, 1959

Stock	Number of units (*thousands*)	Book value (*million lire*)	Stock market value Dec. 31, 1959 (*million lire*)
SME	10.265	8.649	19.600
SESO	4.388	6.528	19.200
SESO 5/10	997	1.068	2.200
Edison	3.066	4.742	14.000
Volta ord.	681	1.192	2.000
SADE	6.407	5.275	14.500
Sarda	1.137	2.989	10.000
Valdarno	996	1.662	4.300
Beni Stabili	2.337	6.596	15.500
Catini	2.337	2.930	7.500
Pirelli S.p.A.	109	131	800
Italcementi	633	2.751	12.500
Condotte	469	173	500
De Angeli-Frua	324	647	1.600
Pirelli & C.	102	256	500
Others quoted		762	1.400
Total of stocks quoted		46.326	126.100
Stocks without quotation		6.447	6.447
Total		52.773	132.547

BASTOGI

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Investment holdings	45.6	49.6	54.7	55.7
less: long-term debt	0.4	0.4	0.4	0.4
	+ 45.2	+ 49.2	+ 54.3	+ 55.3
Current claims	14.6	18.0	17.2	16.6
less: current liabilities	14.1	21.1	21.0	18.7
	+ 0.5	— 3.1	— 3.8	— 2.1
Cash and bank	—	—	—	—
Net worth	45.7	46.1	50.5	53.2
of which: capital stock	36.–	36.–	42.–	45.–
Ratio of net worth to capital stock	1.27	1.28	1.20	1.18
Nominal value of share (*lire*)	1,000	1,000	1,000	1,000
Book value of share (*lire*)	1,270	1,280	1,200	1,180

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Gross receipts	4.3	5.2	5.5	7.9
Net profit	3.1	3.3	3.6	3.9
Dividends paid out (unchanged since 1951)	2.9	3.0	3.4	3.8
Dividend per share (*lire*)	80	80	80	85

Southern Italy; when its railways were subsequently nationalized, it became a general finance company.

Bastogi now controls the largest electricity companies in Sicily and in Sardinia, *i.e.* the *Società Generale Elettrica Sicilia* and the *Elettrica Sarda*, a large Rome real estate company called *Istituto Romano dei Beni Stabili*, and a number of smaller firms. But *Bastogi* is also — and perhaps we should say above all, if we look at the composition of its investment portfolio — an investment company with strong minority holdings in many other concerns.

Bastogi's investment holdings at the end of 1959 were valued in the books at 52.8 billion lire; as will be seen in the accompanying table, they

were worth 130 billion at market prices of December 31, 1959. After a dividend of 80 lire per share had been paid for eight years on repeatedly increased capital, the dividend was raised to 85 lire for 1959, when there was also another free capital issue, raising the capital stock from 42 to 45 billion lire. In view of all this, *Bastogi* is one of the finest shares on the Italian stock market.

Pirelli & C. has its main interests in the rubber industry, and *Sviluppo* (*Società per lo Sviluppo delle Imprese Industriali*) in the hotel industry, through its majority holding in the largest Italian hotel company, *Compagnia Italiana Grandi Alberghi - Ciga*, which owns and runs 18 luxury hotels in all the largest towns of Italy.

Both companies also have important minority holdings, and, as in the case of *Bastogi*, their investments are entered in the books at well below market price.

Among the subsidiaries of *Pirelli & C.*, the outstanding one is *Pirelli S.p.A.*, producer of automobile tyres, electric cables and rubber articles in general. *Pirelli S.p.A.* is one of the most important companies in Europe. It owns 18 factories in Italy, including the ultra-modern *Bicocca* at Milan, and has numerous subsidiaries in Italy and abroad. The foreign subsidiaries are controlled by the *Société Internationale Pirelli, S.A.*, at Basel, which in its turn is owned by the two Italian Pirelli companies.

Pirelli S.p.A. is an exceptionally sound company. Plant is written off to a large extent, investment holdings comfortably cover long-term debts, and current claims exceed current liabilities by well over one-third. Cash and bank balances are ample. Pirelli shares are very popular with investors. Notwithstanding the fact that sales results were not too brilliant in 1958, the company was able to increase its 1958 dividend from 130 to 140 lire. This has been maintained for 1959.

Invest, finally as has already been noted, is an investment trust of the closed end type. Its invested capital amounts to 15 billion lire, and its investments are well scattered throughout all sections of the stock exchange list. As of December 31, 1959, the market value of the investments was more than twice their cost.

SVILUPPO

Investment holdings on March 31, 1959 and market value of December 31, 1959

Stock	Number of units (*thousands*)	Book value (*million lire*)	Stock market value Dec. 31, 1959 (*million lire*)
Assac. Generali	5.4	129	415
Bastogi	898.0	980	2,900
CIGA	2,296.5	1,680	16,000
FIAT	1,020	1,197	2,700
Italgas	265	323	530
Sme	171	123	330
Catini	1,870	2,312	6,100
Pirelli	85	312	600
SADE	2,359	2,358	5,850
Others quoted	2,565	292	580
Total of stocks quoted		9,706	35,675
Stocks		2,359	2,359
Total		12,065	38,034

PIRELLI & C.

Investment holdings on December 31, 1958 and market value of December 31, 1959

Stock	Number of units (*thousands*)	Book value (*million lire*)	Stock market value Dec. 31, 1959 (*million lire*)
Mediobanca	12	176	475
La Centrale	59	188	1,100
Bastogi	98	67	310
Cot. Cantoni	43	27	1,150
Edison	117	101	540
STET	90	203	370
Montecatini	1,519	2,293	4,950
FIAT	2,796	1,338	7,400
Aedes	263	70	1,300
Incet	263	84	1,050
Pirelli S.p.A.	1,822	1,944	12,750
Others		706	1.650
Total		7,199	33,000

PIRELLI S.P.A.

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	66.0	70.1	74.0	78.2
less: depreciation	40.6	45.1	48.9	52.6
	+ 25.4	+ 25.0	+ 25.1	+ 25.6
Inventories	+ 20.3	+ 19.8	+ 18.1	+ 18.1
Investment holdings	15.9	18.1	18.8	21.2
less: long-term debt	-36.2	-35.3	-35.9	-37.8
	- 20.3	- 17.2	- 17.1	- 16.6
Current claims	37.9	36.9	40.5	45.3
less: current liabilities	16.8	18.1	20.0	25.2
	+ 21.1	+ 18.8	+ 20.5	+ 20.1
Cash and bank	+ 5.6	+ 6.2	+ 8.0	+ 7.3
Net worth	52.1	52.6	54.6	54.5
of which: capital stock	24.0	24.0	24.0	24.0
Ratio of net worth to capital stock	2.17	2.19	2.28	2.27
Nominal value of share (*lire*)	1,000	1,000	1,000	1,000
Book value of share (*lire*)	2,170	2,190	2,280	2,280

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales	97.3	96.3	90.9	102.0
Net profit	3.5	3.6	3.6	3.6
Dividends paid out	3.1	3.1	3.4	3.4
Dividend per share (*lire*)	130	130	140	140

Private industrial groups

The companies listed in Part C of Table 2 are both industrial and holding companies. With the exception, perhaps, of *Edison*, their industrial activities are their primary concern. In all cases their subsidiaries are mainly smaller firms operating in fields related or complementary to the mother company's.

The most important industrial holdings are *Edison*, *Montecatini* and *Fiat*. *Edison* recenty ventured out of its main field, which is electricity,

into other branches, including especially the chemical industry and man-made fibres; its original electricity business was handed over to *Edisonvolta*, a new firm specially set up for this purpose in 1955. In terms of its own capital stock and the capital stock of its associates *Edison* is today

EDISON

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	96.8	85.1	90.5	94.9
less: current liabilities	34.4	35.6	40.5	45.3
	+ 62.4	+ 49.5	+ 50.0	+ 49.6
Inventories	+ 6.6	+ 7.8	+ 8.0	+ 8.5
Investment holdings	166.4	172.4	190.4	200.3
less: long-term debt	15.4	15.1	16.7	20.3
	+ 151.0	+ 157.3	+ 171.7	+ 180.0
Current claims	62.5	109.9	78.7	104.9
less: current liabilities	70.9	95.4	79.1	88.3
	− 8.4	+ 14.5	− 0.4	+ 16.6
Cash and bank	+ 4.8	+ 6.0	+ 9.5	+ 14.1
Net worth	216.4	235.1	238.8	268.8
of which: capital stock	160.0	180.0	180.0	200.0
Ratio of net worth to capital stock	1.35	1.31	1.33	1.34
Nominal value of share (*lire*)	2,000	2,000	2,000	2,000
Book value of share (*lire*)	2,700	2,620	2,660	2,680

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales	...	...	...	...
Net profit	11.0	11.2	12.4	13.7
Dividends paid out	10.4	10.6	11.7	13.5
Dividend per share (*lire*)	130	130	130	135

the largest private industrial group in Italy. While its interests are widespread, electricity still predominates by a wide margin.

As the company's particulars show, investment holdings are the largest item in the assets, though industrial plant also stands at a very high figure. The financial situation is sound and well-balanced. From

the investor's point of view, *Edison* is a first class stock; it is also one of the few which never once missed a dividend ever since the company was founded in 1889.

Eleven companies of the *Edison* group are quoted on the stock exchange, as shown in Table 4 above. Two of these, *Mittel* and *Nord Milano*, are railway companies; one, *Châtillon*, is in the artificial textiles branch, and eight are in the electricity sector. Among companies not quoted on the stock exchange we may mention *Sicedison*, a large chemical and petrochemical concern in which Monsanto Chemical C. has an interest; *Celene*, also in the chemical industry, in which Union Carbide and Carbon C. have an interest; and *Sincat*, which is at present putting up a compound fertilizer factory at Syracuse, in Sicily.

Edison furthermore controls *Selni* (*Società Elettronucleare Italiana*), in which other groups also have interests, and has started a great number of other ventures in the electricity sector. Finally, it has the distribution of gas for the city of Milan.

In 1959 *Edison*'s capital stock was raised to 200 billion lire, and early in 1960 the company issued bonds in the amount of 50 billion lire. The dividend was increased from 130 to 135 lire.

Montecatini, società generale per l'industria mineraria e chimica, is the largest chemical and mining concern in Italy and one of the largest in Europe. Montecatini has 150 works in Italy, mainly in mining and quarrying (bauxite, pyrites, sulphur, marble), in aluminium production and in the petrochemical and chemical industries (nitrogen, sulphuric acid, chemical fertilizers, resins, miscellaneous chemical products). It also has power stations of its own, with an annual capacity of 3,000 million Kwh. *Montecatini* is very well known abroad, partly because of its own factories and activities, and partly through its widely used industrial patents. *Montecatini* stock is quoted in New York and Paris, and on German stock exchanges.

A look at the company's accounts shows a high percentage of amortization and a very satisfactory ratio of current claims to current liabilities. Liquid funds in bank deposits are high. The company's results have improved considerably in 1959.

Recently *Montecatini* raised a 10 million dollar loan in the United States and 30 billion lire in Italy. The first is to be used for the construction of a chemical factory in Virginia, and the second to finance a large petrochemical plant at Brindisi, in Southern Italy.

MONTECATINI

Statement of condition	Business year (*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	250.0	263,4	285.3	313.6
less: depreciation	155.2	167.8	180.3	192.7
	+ 94.8	+ 95.6	+ 105.0	120.9
Inventories	+ 41.2	+ 47.9	+ 51.2	+ 48.7
Investment holdings	41.1	44.1	50.8	55.9
less: long-term debt	- 66.3	- 66.9	- 95.3	-101.5
	- 25.2	- 22.8	- 44.5	- 45.6
Current claims	54.1	65.1	76.5	99.2
less: current liabilities	38.0	41.0	55.2	- 65.9
	+ 16.1	+ 24.1	+ 21.3	+ 33.3
Cash and bank	+ 25.0	+ 24.7	+ 35.8	12.3
Net worth	151.9	169.5	168.8	169.6
of which: capital stock	84.0	100.0	100.1	100.0
Ratio of net worth to capital stock	1.81	1.69	1.69	1.70
Nominal value of share (*lire*)	1,000	1,000	1,000	1,000
Book value of share (*lire*)	1,800	1,700	1,690	1,700

Income data	(*billion lire*)			
	1956	1957	1958	1959
Sales	152.0	152.6	146.6	159.5
Net profit	10.9	11.6	10.8	12.4
Dividends paid out	9.7	11.5	11.5	11.5
Dividend per share (*lire*) (unchanged since 1953)	115	115	115	115

Although none of Montecatini's subsidiaries is quoted on the stock exchange, some of them are quite important firms, including, for instance, *Acna*, *Cokitalia*, *Farmitalia*, *Montevecchio*, *Rhodiatoce*, and others. Finally, *Montecatini* has interests in many foreign companies.

Fiat is the largest engineering concern in Italy. While its main business is the manufacture of cars, it is also active in many and important related fields, such as the manufacture of electric household appliances, aeroplanes, motors in general, agricultural machines, rolling stock, etc. Altogether, *Fiat's* secondary activities account for 30 per cent of its sales.

Fiat's balance sheet position is very satisfactory. Of the company's 412 billion lire's worth of fixed assets, about half is written off. Current liabilities exceed current claims by more than 20 per cent, but the difference is comfortably covered by the very liquid cash position. Net worth is 2.3 times as much as capital stock. The dividend was 80 lire per share during the last three years, having previously increased continuously since 1948 on successively growing capital. In 1959 it has been again raised to 85 lire. It may be worth mentioning that, given the low nominal value of the shares, *Fiat* distributes more in dividends than any other

FIAT

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	327.5	387.7	412.6	434.3
less: depreciation	149.3	178.6	199.7	229.5
	+ 178.2	+ 200.1	+ 212.9	+ 204.8
Inventories	+ 42.6	+ 58.2	+ 52.4	+ 57.7
Investment holdings	45.4	50.4	56.8	64.7
less: long-term debt	84.3	113.1	117.0	116.8
	— 38.9	— 62.7	— 60.2	— 52.1
Current claims	75.1	109.0	82.2	98.6
less: current liabilities	94.8	106.3	99.0	115.8
	— 19.7	— 2.7	— 16.8	— 17.2
Cash and bank	+ 36.4	+ 40.4	+ 46.2	+ 52.7
Net worth	198.6	233.3	234.5	245.9
of which: capital stock	76.0	100.0	100.0	100.0
Ratio of net worth to capital stock	2.61	2.33	2.34	2.46
Nominal value of share (*lire*)	500	500	500	500
Book value of share (*lire*)	1,350	1,165	1,170	1,230

Income data	Business year (*billion lire*)			
	1956	1958	1958	1959
Sales	306.0	319.0	339.0	405.5
Net profit	14.1	13.9	16.6	19.7
Dividends paid out	12.2	12.4	15.0	17.0
Dividend per share (*lire*)	80	80	80	80

Italian company. This year, for example, it will distribute 17 billion lire, as against 13.5 billion to be distributed by *Edison*, whose capital stock is twice as large.

Like *Montecatini*, *Fiat* has no subsidiaries which are quoted on the stock exchange.

Snia Viscosa, società per l'industria delle fibre tessili artificiali e prodotti affini, heads the largest Italian textile group. It is also active in the

SNIA VISCOSA

Statement of condition	(*billion lire*)			
	31/12/56	31/12/57	31/12/58	31/12/59
Fixed assets	72.8	77.0	79.9	85.1
less: depreciation	47.6	49.7	51.8	55.4
	+ 25.2	+ 27.3	+ 28.1	+ 29.7
Inventories	+ 9.9	+ 10.8	+ 8.7	+ 10.4
Investment holdings	24.7	24.8	25.2	27.0
less: long-term debt	7.8	13.8	13.5	13.2
	+ 16.9	+ 11.0	+ 11.7	+ 13.8
Current claims	18.7	19.2	22.5	25.3
less: current liabilities	13.5	10.9	13.1	17.2
	+ 5.2	+ 8.3	+ 9.4	+ 8.1
Cash and bank	+ 1.2	+ 1.2	+ 1.0	+ 2.8
Net worth	58.4	58.6	+ 58.9	64.8
of which: capital stock	21.0	21.0	21.0	27.4
Ratio of net worth to capital stock	2.78	2.79	2.80	2.36
Nominal value of share (*lire*)	1,200	1,200	1,200	1,200
Book value of share (*lire*)	3,340	3,350	2,390	2,990

Income data	Business year (*billion lire*)			
	1956	1957	1958	1959
Sales *	70.4	67.1	70.4	. . .
Net profit	2.0	2.0	2.1	3.0
Dividends paid out	1.7	1.7	1.7	2.7
Dividend per share (*lire*) (unchanged since 1954)	100	100	100	120

(*) Including the other companies of the group.

related chemical sector and elsewhere, most recently in oil prospecting — which, if successful, should provide the company with a valuable raw materials supply of its own. The company has very strong reserves, its net worth being 2.3 times its capital stock. Investment holdings are twice as much as long-term debt and current claims nearly 1.5 current liabilities. In 1959 *Snia Viscosa* raised its capital to 27.4 billion lire, partly by a free scrip issue and partly against new money. The dividend was increased from 100 to 120 lire.

Two of the companies controlled by *Snia Viscosa* are quoted on the stock exchange: *Cotonificio Olcese* and *Filature Cascami di Seta*, which latter is a recent acquisition. *Snia Viscosa* has many interests in foreign companies, especially in Spain and Latin America.

Italcementi — Fabbriche Riunite di Cemento — is the largest Italian producer of cement and related construction materials. The company has 21 factories of its own and its subsidiaries have another 8. While most of *Italcementi*'s own factories are in Northern Italy, its subsidiaries operate in Southern Italy, Sicily and Sardinia. In recent years the company has been progressively spreading into many other fields; not long ago it acquired control of the old automobile firm of *Lancia*, which is to be reorganized and its output increased.

The company's position is very sound. Fixed assets are written off by 2/3, investments largely exceed long term debts and current claims and liabilities are well balanced. Recently, *Italcementi* has doubled its capital (from 12.0 to 24.0 billion lire) half by increasing the nominal value of its shares to 3,000 lire and half for cash. The dividend for 1959 has been increased to 600 lire. None of *Italcementi*'s subsidiaries are quoted on the stock exchange.

The *Società Adriatica per l'Elettricità, Sade*, is an important concern mainly engaged in electricity generation and distribution in North-East Italy (especially Veneto and Emilia). It controls many other companies, again mostly in the electricty sector and also in water distribution, including *Acqua Marcia*, which owns the aqueducts supplying large parts of Rome and has its own stock exchange quotation. The company is also connected with the finance company *Sviluppo*, which was discussed a little earlier.

Sade owns 29 hydroelectric power stations, of which ten were built since the last war, and has an interest in nuclear power through *Selni*. It also has a few thermal power stations with a combined capacity of

ITALCEMENTI

Statement of condition	(*billion lire*)			
	30/6/57	30/6/58	31/12/58	31/12/59
Fixed assets	51.6	56.0	58.6	61.4
less: depreciation	30.4	33.6	35.9	41.3
	+ 21.2	+ 22.4	+ 22.7	+ 20.1
Inventories	+ 2.3	+ 2.1	+ 2.4	+ 2.0
Investment holdings	11.1	11.3	11.3	12.8
less: long-term debt	10.9	10.8	10.8	10.6
	+ 0.2	+ 0.5	+ 0,5	+ 2.2
Current claims	6.9	8.8	7.8	9.3
less: current liabilities	8.5	10.7	12.4	9.1
	- 1.6	- 1.9	- 4.6	+ 0.2
Cash and bank	+ 3.7	+ 3.7	+ 4.7	+ 4.2
Net worth	25.8	26.8	25.7	28.7
of which: capital stock	12.0	12.0	12.0	12.0
Ratio of net worth to capital stock	2.15	2.23	2.14	2.39
Nominal value of share (*lire*)	2,000	2,000	2,000	2,000
Book value of share (*lire*)	4,280	4,780	4,280	4,780

Income data	Business year (*billion lire*)			
	1955/56	1957/58	II half 1958	1959
Sales	36.3	34.3	17.1	34.5
Net profit	3.2	3.1	1.6	3.8
Dividends paid out	3.0	3.0	1.5	3.6
Dividend per share (*lire*)	500	500	250	600

230,000 Kw. The company's net worth is very considerable, far and away the main item being fixed assets. Current items show a rather marked excess of debts on claims. *Sade* shares are widely traded on Italian stock exchanges and are a very safe investment. Their dividend has been maintained at 70 lire ever since 1948, although capital was increased on more than one occasion, partly by free issues and partly against new money.

The *Società Italiana per il Gas, Italgas*, is a gas producer and has the household distribution of gas in something like 40 Italian towns,

SADE

Statement of condition	(*billion lire*)			
	31/3/57	31/3/58	31/12/58	31/12/59
Fixed assets	155.7	171.9	181.6	197.5
less: depreciation	56.5	64.5	69.9	71.0
	+ 99.2	+ 107.4	+ 111.7	+ 126.5
Inventories	+ 3.7	+ 3.2	+ 3.2	+ 3.1
Investment holdings	20.2	20.2	20.5	20.0
less: long-term debt	27.6	33.0	32.0	32.1
	- 7.4	- 12.8	- 11.5	- 12.1
Current claims	14.7	17.2	15.7	16.9
less: current liabilities	23.6	22.3	24.2	38.4
	- 8.9	- 5.1	- 8.5	- 21.5
Cash and bank	+ 1.5	+ 11.6	+ 9.0	+ 5.0
Net worth	88.1	104.3	103.9	101.0
of which: capital stock	54.0	72.0	72.0	72.0
Ratio of net worth to capital stock	1.63	1.45	1.44	1.40
Nominal value of share (*lire*)	1,000	1,000	1,000	1,000
Book value of share (*lire*)	1,630	1,450	1,520	1,410

Income data	Business year (*billion lire*)			
	56/57	57/58	58	59
Sales	22.2	...	...	...
Net profit	4.0	4.3	4.0	31.3*
Dividends paid out	3.8	4.1	3.8	5.0
Dividend per share (*lire*)	70	70	52.50	70

(*) Nine months.

including Rome, Turin, Florence, Venice and Leghorn. It owns a great number of subsidiaries in related industrial fields, such as coal, liquid gas, and aqueducts.

The company's position is very sound and steady. In the public utilities field, which accounts for the bulk of the company's business, one can expect a steady income but neither windfall profits nor rapid growth. This no doubt accounts for the quiet life the stock usually leads on the market.

Of the many subsidiaries of *Italgas*, two are quoted on the stock exchange; they are *Pibigas*, distributors of liquid gas in cylinders for domestic use, and *Società per la Condotta di Acque*, a Turin water company.

ITALGAS

Statement of condition	(*billion lire*)		
	31/3/57	31/3/58	31/3/59
Fixed assets	52.7	55.1	56.7
less: depreciation	28.8	30.2	29.2
	+ 23.9	+ 24.9	+ 27.5
Inventories	+ 3.6	+ 4.0	+ 3.3
Investment holdings	10.7	10.7	10.7
less: long-term debt	1.4	1.5	1.5
	+ 9.3	+ 9.2	+ 9.2
Current claims	5.4	5.2	5.4
less: current liabilities	10.9	7.9	9.2
	− 5.5	− 2.7	− 3.8
Cash and bank	+ 0.6	+ 1.1	+ 0.5
Net worth	31.9	36.5	36.7
of which: capital stock	19.9	23.9	23.9
Ratio of net worth to capital stock	1.60	1.53	1.54
Nominal value of share (*lire*)	1,000	1,000	1,000
Book value of share (*lire*)	1,000	1,520	1,530

Income data	Business year (*billion lire*)		
	1956/57	1957/58	1958/59
Sales	25.9	25.2	...
Net profit	1.7	2.0	2.0
Dividends paid out	1.6	1.9	1.9
Dividend per share (*lire*) (unchanged since 1953)	80	80	80

Other stocks on Italian stock exchanges

We are getting to the end of our brief survey. While the financial groups we have discussed encompass very nearly all the major companies quoted on the stock exchange, there are a few others outside these groups which would well merit an analysis. The difficulty is where to stop. One stock which certainly should be mentioned is the highly popular

one of *Assicurazioni Generali* of Trieste, the largest Italian insurance company. This well over centenarian firm, which was founded in 1831, operates directly or indirectly in 59 countries, through more than 70 subsidiaries. Its fixed assets, which are valued at 40 billion lire, include something like 300 urban buildings, of which 200 in Italy and 100 abroad; its investment holdings, entered in the books at about 60 billion lire, are probably worth 3 or 4 times as much, given the rise in share prices during these last few years. For all these reasons, *Assicurazioni Generali* have always been popular — so much so that currently the shares are quoted at about 100,000 lire, which, at a dividend of only 700 lire, means a yield of less than 1 per cent.

Other companies which might be mentioned are *Cartiere Burgo*, the largest Italian pulp and paper manufacturers; *Rinascente*, which owns the department store chains of *Rinascente* and *Upim* (the Italian equivalent of Woolworths) and whose shares have given investors much satisfaction over the last five or six years; *Olivetti*, known the world over for its typewriters and calculating machines; *Motta*, the Milan confectioners and makers of the famous *panettone*; *Società Generale Immobiliare* of Rome, which is engaged mainly in residential building, but is equipped to handle any other kind of construction and public works. This list could well be continued.

In conclusion, we thought it well to provide an overall picture of the leading stocks traded on Italian stock exchanges. To this end we have listed, in Table 5, the 25 companies ranking highest by seven different standards, namely:

1) Capital stock;
2) Net worth;
3) Sales;
4) Number of employees;
5) Stock market valuation of capital stock;
6) Stock exchange turnover;
7) Number of shareholders.

While the first four of these criteria are purely economic and concern the company as such, the last three are of technical stock exchange interest. Such a table cannot, of course, do anything like establish an absolute hierarchy, but taken as a whole, it may perhaps form the background for an informed subjective assessment of the relative position of leading shares on Italian stock markets, and as such may provide some guidance to would be investors.

TWENTY-FIVE LEADING STOCKS

Capital stock (*million lire*)		Net worth (*million lire*)		Sales (*million lire*)	
Edison	200,000	Edison	226,440	FIAT	339,000
Edisonvolta	140,000	FIAT	214,543	Montecatini	146,621
STET	140,000	Montecatini	157,629	ILVA	101,340
SIP	103,423	Edisonvolta	140,845	Pirelli S.p.A.	90,864
FIAT	100,000	SIP	118,729	Cornigliano	80,284
Montecatini	100,000	SME	107,291	SNIA-Viscosa	70,400
SME	94,978	SADE	95,398	Ass. Generali *	70,093
SADE	72,000	STET	84,214	Dalmine	69,149
Finsider	70,686	Finsider	74,570	Edisonvolta	63,897
Cornigliano	50,000	Terni	66,643	La Rinascente	61,295
Finelettrica	45,000	ILVA	58,552	Eridania	60,000
Romana El.	45,000	SNIA-Vescosa	56,580	Acc. e Ferr. Falck	54,424
Selt-Valdarno	45,000	Vizzola	51,485	Italcementi	51,355
ILVA	44,000	Cornigliano	50,500	Terni	44,448
Vizzola	42,230	Pirelli S.p.A.	50,247	Cant. Riun. Adr.	40,000
Bastogi	42,000	Bastogi	46,745	R.A.S. *	32,000
La Centrale	42,000	Finelettrica	46,651	Cartiere Burgo	27,950
CIELI	35,000	Selt-Valdarno	45,832	SIP	27,566
Terni	33,250	Romana El.	45,649	Italgas	25,216
SESO	31,725	SESO	44,855	SME	24,000
TETI	30,000	La Centrale	43,008	SADE	24,000
SNIA-Viscosa	27,450	CIELI	38,236	TETI	23,108
Pirelli S.p.A.	24,000	Italgas	32,975	Lanerossi	21,419
Eridania	24,000	Unes	32,812	Mottà	19,235
Italgas	23,880	TETI	31,010	F. Tosi	18,460

* Insurance premiums.

(1) Sales, number of employees and number of shareholders are based on 1958 reports. As we write use them here. Capital stock, net worth and stock market valuation of capital stock are as of December 31,

CLASSIFIED BY SEVEN STANDARDS (1) TABLE 5

Number of employees		Stock market valuation of capital stock (*million lire*)		Stock exchange turnover (*million lire*)		Number of shareholders	
FIAT	79,930	FIAT	540,000	FIAT	76,965	Montecatini	187,527
Montecatini	49,500	Edison	492,000	Edison	42,653	FIAT	100,000
ILVA	21,882	Montecatini	342,200	Montecatini	37,549	SIP	67,000
Pirelli S.p.A.	20,300	STET	306,040	SNIA-Viscosa	34,695	STET	60,000
SNIA-Viscosa	16,500	Edisonvolta	352,800	Ass. Gen.	21,562	Italgas	55,000
Cant. Riun. Adr.	14,375	SIP	202,537	Finsider	12,784	SADE	48,050
Falck	13,572	SME	197,650	Pirelli S.p.A.	11,580	Bastogi	40,995
Dalmine	11,664	SADE	174,240	Bastogi	11,142	Pirelli S.p.A.	37,500
Terni	9,624	Pirelli S.p.A.	166.200	STET	10,372	SME	34,871
Lanerossi	9,359	Gen. Ass.	155,400	Liquigas	10,000	Rumianca	27,306
Edisonvolta	8,797	Finsider	154,661	La Centrale	9,792	Viscosa	26,592
La Rinascente	8 564	La Centrale	152,460	Terni	9,139	Pirelli & C.	26,125
TETI	6,434	Bastogi	134,358	ILVA	9,100	Finsider	26,000
Cornigliano	6,094	Italcementi	126,000	Italcementi	8,003	Pibigas	25,200
Cartiere Burgo	5,550	Cucirini	106,500	Edisonvolta	7,100	Immobiliare	24,000
Italcementi	5,421	SNIA-Viscosa	104,424	Pirelli & C.	7,000	Terni	22,300
Cot. Merid.	5,390	Vizzola	101,352	SME	6,952	Sviluppo	20,632
E. Marelli	5,334	Selt-Valdarno	101,025	SADE	6,897	Romana El.	16,391
Ass. Gen.	5,183	Finelettrica	100,350	SAFFA	6,700	ILVA	16,000
Tecnomasio	4,631	Romana El.	99,225	Finelettrica	6,500	La Centrale	15,700
Italgas	4,546	Cornigliano	90,000	Anic	6,188	Ass. Gen.	14,500
Motta	4,378	ILVA	98,000	Gen. Immob.	5,900	Unes	13,900
SADE	4,170	Gen. Immobil.	81,280	Rinascente	5,623	Liquigas	13,688
Franco Tosi	4,086	Falck	79,500	Italgas	5,600	Nebiolo	13,153
Châtillon	4,035	Ras	74,304	Lanerossi	4,850	SAFFA	13,150

(March-April 1960) we have for some companies the 1959 reports, but for reasons of homogeneity we cannot 1959. Stock Exchange turnover refers to 1959.

Table 5 includes, in all, 51 companies. We have set out in a separate table the frequency with which each of them appears among the leading 25 by our seven standards.

DISTRIBUTION OF THE 51 COMPANIES LISTED IN TABLE 5

Number	Companies	Number of headings under which listed
6	Montecatini, FIAT, SADE, ILVA, Pirelli S.p.A., Snia-Viscosa	7
4	SME, Terni, Edisonvolta, Italgas	6
7	STET, Finsider, Bastogi, SIP, La Centrale, Assicurazioni Generali, Cornigliano	5
5	Edison *, Finelettrica, Italcementi, Romana Elettricità, TETI	4
6	Valdarno, Vizzola, Falck, La Rinascente, Generale Immobiliare, Lanerossi	3
13	Pirelli & C., SESO, Cantieri Riuniti, Franco Tosi, Dalmine, Burgo, CIELI, Liquigas, SAFFA, Eridania, UNES, RAS, MOTTA	2
10	Sviluppo, Rumianca, Pibigas, Cotoniere Meridionali, E. Marelli, Cucirini, ANIC, Tecnomasio, Châtillon, Nebiolo	1

* Edison would almost certainly figure under all the seven headings, if its sales figures, staff and number of shareholders were known.

Six companies are among the leaders on all seven counts; they are *Montecatini*, *Fiat*, *Sade*, *Ilva*, *Pirelli S.p.A.* and *Snia Viscosa*; four companies are shown six times, seven five times, etc. We should add, though, that while the data on capital stock, net worth, stock exchange valuation of capital and turnover are known for all the companies, data on sales, personnel and number of shareholders are not known for all of them, and these latter classifications are therefore incomplete. To give an example, if the figures were known, *Edison* would almost certainly appear seven times in our table. Finally, the category "sales" does not, of course, exist for financial companies and their personnel is in the nature of things very small. For this reason any financial company which figures under five headings is of comparable importance with an industrial company figuring under all seven.

Rome PIETRO MANES

BANCA NAZIONALE DEL LAVORO

HEAD OFFICE: ROME

VIA VITTORIO VENETO, 119

Condensed Statement of Condition, March 31, 1960

ASSETS	(Million lire)	LIABILITIES	
Cash, Balances with Bank of Italy & Money at call	163,483.7	Capital	20,000.0
Treasury Bills	230,265.9	Ordinary Reserve Fund	11,000.0
Govt. or Govt.-guaranteed Securities	86,909.9	Staff Retirement Fund & Provident Fund	23,196.3
Other Securities	21,070.8	Deposit & Current Accounts	787,845.7
Bills discounted	257,663.8	Correspondents	185,106.4
Advances and Loans	307,282.7	Current accounts with Annexed Sections	10,142.7
Contangoes	21,111.8	Circular cheques (*assegni circolari*)	23,893.6
Due from Correspondents	86,266.8	Advances taken	39.7
Current accounts with Annexed Sections	10,626.4	Bills for collection	46,466.8
Customers' liabilities for guarantees, Acceptances, etc.	135,772.1	Guarantees, Acceptances, etc.	135,772.1
Miscellaneous accounts	4,165.1	Miscellaneous accounts	83,860.8
Due from capital subscribers	9,162.8	Unearned discount, etc.	5,944.1
Participations	—	Profit as per attached account	513.6
Premises, Furniture and Equipment	—		
Total	1,333,781.8	*Total*	1,333,781.8
Securities deposited by third parties	453,620.7	Depositors of securities	453,620.7
Staff Retirement Fund & Provident Fund: Bank's securities deposited as guarentee	23,388.6	Bank's securities guaranteeing Staff Retirement Fund & Provident Fund	23,388.6
	1,810,791.1		1,810,791.1

AUTONOMOUS SECTIONS FOR SPECIAL CREDITS

SECTION FOR CREDIT TO MEDIUM AND MINOR INDUSTRIES

Capital, Reserves and Government Guarantee Fund L. 3,601,823,259

SECTION FOR HOTEL AND TOURIST CREDIT

Aggregate Capital and Reserves L. 4,947,832,068

SECTION FOR CO-OPERATIVE CREDIT

Capital and Reserves L. 2,922,462,235 - Government Guarantee L. 2,000,000,000

SECTION FOR MORTGAGE CREDIT

Aggregate Capital and Reserves L. 4,476,872,959

SECTION FOR CINEMA CREDIT

Aggregate Capital and Reserves L. 2,052,680,809

SECTION FOR THE FINANCING OF PUBLIC WORKS AND PUBLIC UTILITY PLANTS

Aggregate Capital and Reserves L. 1,000,000,000

BANCA NAZIONALE DEL LAVORO

BRANCHES IN ITALY

ALGHERO
ANCONA
ASCOLI PICENO
AVELLINO
BARI
BENEVENTO
BERGAMO
BIELLA
BOLOGNA
BOLZANO
BRESCIA
BRUNICO
CAGLIARI
CARRARA
CASTEGGIO
CASTEL SAN GIOVANNI
CATANIA
CATTOLICA
CHIETI
CHIOGGIA
CIVITANOVA MARCHE
CIVITAVECCHIA
COMO
CORIGLIANO CALABRO
CORTEOLONA
COSENZA
CREMONA
CROTONE
CUNEO
EMPOLI
FABRIANO
FANO
FERMO
FERRARA
FIORENZUOLA D'ARDA
FIRENZE
FOGGIA
FOLIGNO
FORLÌ
FRATTAMAGGIORE
GENOVA
GENOVA - SAMPIERDARENA
GORIZIA
GROSSETO
IGLESIAS
IMPERIA
JESI
LANCIANO
L'AQUILA
LATINA CENTRO
LATINA SCALO
LECCE
LIVORNO
LUCCA
MACERATA
MANTOVA
MERANO
MESSINA
MILANO
MODENA
MONSUMMANO TERME
NAPOLI
NOLA
NUORO
ORISTANO
PADOVA
PALERMO
PARMA
PAVIA
PERUGIA
PESARO
PESCARA
PIACENZA
PORTO RECANATI
PORTO SAN GIORGIO
PORTO TORRES
PRATO
RAVENNA
REGGIO CALABRIA
REGGIO EMILIA
RICCIONE MARINA
RIMINI
ROMA
ROSARNO
SALERNO
SAN BENEDETTO DEL TRONTO
SASSARI
SAVONA
SCHIO
SENIGALLIA
SOTTOMARINA DI CHIOGGIA
STRADELLA
SULMONA
TERAMO
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